EFFICACY OF MERGER AND ACQUISITION IN INDIAN BANKING INDUSTRY

(A study with reference to select Merged Banks in India)

A Thesis submitted to the Pondicherry University in partial fulfilment of the requirements for the award of the degree of

DOCTOR OF PHILOSOPHY

IN

COMMERCE

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This is to certify that the Ph.D. thesis entitled **"Efficacy of Merger and Acquisition in Indian Banking Industry (A study with reference to Select Merged Banks in India)"** submitted for the award of the Degree of DOCTOR OF PHILOSOPHY by **K. KALAICHELVAN** is the bonafide research work done by him in the Department of Commerce, School of Management, Pondicherry University, Pondicherry, and that the research has not previously formed the basis for the award of any Degree, Associateship, Fellowship or any other similar title and also, that it represents entirely an independent work carried out by the candidate under my supervision and guidance.

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Declaration

I, **K. KALAICHELVAN,** hereby declare that the thesis entitled, **"Efficacy of Merger and Acquisition in Indian Banking Industry (A study with reference to Select Merged Banks in India)",** submitted to Pondicherry University for the award of Degree of Doctor of Philosophy in Commerce is the original work carried out by me and no part of the thesis has been submitted for the award of any Degree, Diploma, Associateship, Fellowship of other similar title to any University or Institution.

K. KALAICHELVAN

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LIST OF ABBREVIATIONS USED

Acronym	Abbreviation
ANOVA	Analysis of variance
AR	Abnormal Returns
ATR	Asset Turnover Ratio
BOB	Bank of Baroda
C R	Current Ratio
CA	Current Assets
CAMELS	Capital adequacy, Assets quality, Earnings, Liquidity and Sensitivity to Market Risk
CAR	Cumulative Abnormal Return
CARAT	Cash Asset Ratio
CL	Current Liabilities
CMIE	Centre for Monitoring Indian Economy
DEA	Data Envelopment Analysis
FATR	Fixed Asset Turnover Ratio
FDI	Foreign Direct Investment
GPM	Gross Profit Margin
HDFC	Housing Development Finance Corporation
ICICI	Industrial Credit Institute Corporation of India
IDBI	Industrial Development Bank of India
L R	Liquidity Ratio
M & A	Mergers and Acquisitions
M A M	Market Adjusted Model
MM	Market Model
NPA	Non Performing Assets
NPM	Net Profit Margin
O P	Operating Performance
OBC	Oriental Bank of Commerce

Acronym	Abbreviation
OLS	Ordinary Least Square Method
OPM	Operating Profit Margin
PNB	Punjab National Bank
Q A	Quick Asset
Q L	Quick Liabilities
Q R	Quick Ratio
R & D	Research and Development
ROCE	Return on Capital Employed
RONW	Return On Net Worth
SD	Standard deviation
Sig.	Significant
UT	Union Territory
WCTR	Working Capital Turnover Ratio

CHAPTER I

INTRODUCTION AND DESIGN OF THE STUDY

1.1 CORPORATE RESTRUCTURING

Restructuring of business is an integral part of the new economic paradigm. As controls and restrictions give way to competition and free trade, restructuring and reorganization become essential. Restructuring usually involves major organizational change such as shift in corporate strategies to meet increased competition or changed market conditions. This activity can take place internally in the form of new investments in plant and machinery, research and development at product and process levels. It can also take place externally through mergers and acquisitions (M&A) by which a firm may acquire other firm or by joint venture with other firms. This restructuring process has been mergers, acquisitions, takeovers, collaborations, consolidation, diversification etc.[1]

Companies are increasingly using mergers and acquisitions (M&A) mainly for **entering new markets, aiming asset growth, garnering greater market share/additional manufacturing capacitie**s, and **gaining complementary strengths and competencies**, and **to become more competitive in the market place.**

1.2 M&A IN INDIAN INDUSTRY

The Indian economy has undergone a major transformation and structural change following the economic reforms introduced by the government of India in 1991. Since then, the M&A movement in India have gained momentum. " In the liberalized economic and business environment, '**magnitude and competence'** have become the focal points of every business enterprise in Indian as companies have realized the need to grow and expand in businesses that they understand well to face the growing competition. Indian corporate has undertaken restructuring exercise to sell off non-core business and to create stronger presence in their core areas of business interest. M&A emerged as one of the most effective methods of such corporate restructuring and have, therefore, become an integral part of the long-term business strategy of corporate India."[2]

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[1] www.scribd.com/doc/53844805/1/Corporate-Restructuring pp. 1-2

[2] Parmod Mantravadi & A Vidyadhar Reddy (2007) "Mergers and Operating Performance Indian Experience" The Icfai Journal of Mergers Acquisitions, Vol. IV, No, 4, 2007, PP. 53 -66.

1.3 M & A IN BANKING INDUSTRY

The banking industry is an important area in which mergers and acquisitions do make enormous financial gains. As a result of changes in the expectation of the corporate customer, banks are now constrained to rethink their business and devise new strategies. "The Indian banking sector is going through a process of restricting, mainly driven by pervasive trends such as deregulation, disintermediation, technological progress, innovation and severe competition."[3] To gain competitive cost advantage, consolidation of operation in the form of M&A is one of the effective strategies widely adopted by the bankers. Mergers in banks are considered for the purpose of:

1. Expansion/diversification
2. Upgradation of technology
3. Loss making bank merged with another healthy bank for revival
4. Healthy bank merged with another healthy bank to become financially stronger, to meet competitive pressures
5. Growth in profits
6. Increase market share, etc.

Banks allocate resources and control internal processes by effectively managing their employees, facilities, expenses, and sources and uses of funds while working to maximize earning assets and total income. M&A are not new to the Indian banking sector. Between 1961- 2004, 71 mergers took place among various banks in India. M&A deals undertaken in banking sector during pre and post financial sector Reform period are given in the table1.1

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[3] D.S. Prasad and Sandhya Goyal (2008) Issues in banking mergers –An Indian perspective" ICFAI (Special Issue) University Press.

Table 1.1

Schedule of M & A deals of Indian Banks

S. No	Name of Bank Merged	Merger bank	Date of merger
01.	Prabhat Bank Ltd.	NB of Lahore Ltd.	09-03-1961
02.	Indo-Comm Bank Ltd.	Punjab National Bank	25-03-1961
03.	Bank of Nagpur Ltd	Bank of Maharashtra	27-03-1961
04.	New Citizen Bank Ltd.	Bank of Baroda	29-04-1961
05.	TravancoreFor. Bank Ltd	State Bank of Travancore	15-05-1961
06.	Bank of Kerala Ltd.	Canara Bank	20-05-1961
07.	Bank of Poona Ltd.	Sangli Bank Ltd.	03-06-1961
08.	Bank of New India Ltd.	State Bank of Travancore	17-06-1961
09.	Venadu Bank Ltd.	South Indian Bank Ltd.	17-06-1961
10.	Wankaner Bank Ltd.	Dena Bank	17-06-1961
11.	Seasia MidlandBank Ltd.	Canara Bank	17-06-1961
12.	Kottayam Orient-Bank	State Bank of Travancore	17-06-1961
13.	Bank of Konkan Ltd.	Bank of Maharashtra	19-06-1961
14.	Poona Investors Bank	Sangli Bank	28-06-1961
15.	Bharat Industrial Bank	Bank of Maharashtra	01-07-1961
16.	Rayalaseema Bank Ltd.	Indian Bank	01-09-1961
17.	Cuttack Bank Ltd.	United Bank of India	04-09-1961
18.	Pie Money Bank Pvt.	Syndicate Bank	04-09-1961
19.	Moolky Bank Ltd.	Syndicate Bank	04-09-1961
20.	Merchants Bank Ltd.	TPB Ltd.	04-09-1961
21.	Tezpur Industrial Bank	United Bank of India	04-09-1961
22.	G. Raghu. Bank Ltd.	Canara Bank	04-09-1961
23.	SSC Bank Ltd.	United Western Bank Ltd.	06-09-1961
24.	Catholic Bank Ltd.	Syndicate Bank	11-09-1961
25.	Phaltan Bank	Sangli Bank Ltd.	07-10-1961
26.	JCB Ltd.	Central Bank of India	16-10-1961
27.	Bank of Citizen Ltd.	Canara Banking Corp Ltd.	17-10-1961
28.	Karur Mercantile Bank	Laxmi Vilas Bank Ltd.	19-10-1961

29.	Peoples Bank Ltd.	Syndicate Bank	14-11-1961
30.	Pratap Bank Ltd.	Lakshmi Comm. Bank Ltd.	11-12-1961
31.	Unity Bank Ltd.	State Bank of India	20-08-1962
32.	Bank of Algapuri Ltd.	Indian Bank	14-08-1963
33.	Metropolitan Bank Ltd.	United Industrial Bank Ltd.	06-02-1964
34.	Cochin Nayar Bank Ltd	State Bank of Travancore	08-02-1964
35.	SSKP Bank Ltd.	Karur Vysya Bank Ltd.	01-06-1964
36.	Unnao Comm Bank Ltd. .	Bareilly Corp Bank Ltd	12-08-1964
37.	Latin Christian Bank Ltd	State Bank of Travancore	17-08-1964
38.	Southern Bank Ltd.	United Industrial Bank Ltd.	24-08-1964
39.	SJS Bank Ltd.	Belgaum Bank Ltd.	26-10-1964
40.	Bareilly Bank Ltd.	Benarus State Bank Ltd.	16-11-1964
41.	Thiya Bank Ltd.	Lord Krishna Bank Ltd.	16-11-1964
42.	ATB Corp. Ltd.	State Bank of India	25-08-1965
43.	VPM Bank Ltd.	Bank of Madura Ltd.	01-09-1965
44.	Malnad Bank Ltd.	State Bank of Mysore	06-10-1965
45.	Josna Bank Ltd.	Lord Krishna Bank Ltd.	13-10-1965
46.	Amrit Bank Ltd.	State Bank of Patiala	03-02-1968
47.	Chawla Bank Ltd.	New Bank of India	23-04-1969
48.	Bank of Behar Ltd.	State Bank of India	08-11-1969
49.	National Bank of Lahore	State Bank of India	20-02-1970
50.	Miraj State Bank Ltd.	Union Bank of India	20-07-1985
51.	Lakshmi Comm. Bank	Canara Bank	24-08-1985
52.	Bank of Cochin Ltd.	State Bank of India	26-08-1985
53.	HCB Ltd.	Punjab National Bank	19-12-1986
54.	Traders Bank Ltd.	Bank of Baroda	13-05-1988
55.	United Industrial Bank	Allahabad Bank	31-10-1989
56.	Bank of Tamilnad Ltd	Indian Overseas Bank	20-02-1990
57.	Bank of Thanjavur Ltd.	Indian Bank	20-02-1990
58.	Parur Central Bank Ltd.	Bank of India	20-02-1990
59.	Purbanchal Bank Ltd.	Central Bank of India	29-08-1990

Schedule of M & A deals of Indian Banks- Post Reform Period			
60.	New Bank of India	Punjab National Bank	04-09-1993
61.	Bank of Karad Ltd.	Bank of India	1993-1994
62.	**Kashinath Seth Bank**	**State Bank of India**	**1995-1996**
63.	**Punjab Co-op. Bank Ltd.**	**Oriental Bank of Commerce**	**1996-1997**
64.	**Bari Doab Bank Ltd.**	**Oriental Bank of Commerce**	**1996-1997**
65.	**Bareilly Corp. Bank Ltd.**	**Bank of Baroda**	**03-06-1999**
66.	Sikkim Bank Ltd.	Union Bank of India	22-12-1999
67.	**Times Bank Ltd.**	**HDFC Bank Ltd.**	**26-02-2000**
68.	**Bank of Madura**	**ICICI Bank**	**Mar. 2001**
69.	**Benaras State Bank Ltd.**	**Bank of Baroda**	**20-07-2002**
70.	**Nedungadi Bank Ltd.**	**Punjab National Bank**	**01-02-2003**
71.	**Global Trust Bank Ltd.**	**Oriental Bank of Commerce**	**24-07-2004**
72	Centurian Bank	Bank of Punjab Ltd.	01.04.2005
73	United Western Bank Ltd.	IDBI ltd.	02.04.2005
74.	The Ganesh Bank of Kurd. Ltd.	The Federal Bank Ltd.	02.09.2006.
75.	Bharat Overseas	Indian overseas Bank	31.3.2007
76	The Sangli Bank Ltd	ICICI Bank	19.4.2007
77.	Lord Krishna Bank Ltd.	Cent. Bank of Punjab Ltd.	29.8.2007
78	Centurion Bank of Punjab	HDFC Bank	Feb 2008*
79	Bank of Rajasthan	ICICI Bank	Aug 2010*

Source: Lakshminarayanan, P., (2005), Consolidation in the Banking Industry through Mergers and Acquisitions, Special Issue, *Indian Banks Association Bulletin*, Indian Banks Association, (January), pp. 92-99.
Manoj kumuar "Efficiency Gains from Mergers and Acquisitions of Indian Banks: A Data Envelopment Analysis Approach
* **Ashvin Parekh**, (**3 December 2010**)"Industry structure: M&A in Indian Banking" ERNST & YOUNG Quality In Everything We Do

Table 1.1 vividly shows that M&A took place during the 1961-1964 in large numbers. This shows that M&A in Indian Banking industry is not new and it took place as annual phenomenon. In India, financial sector reforms have been undertaken during 1993-94, through which financial institutions especially banks underwent transformational process in a large scale. They evince keen interest in enlarging their operations, widening their network operations by imbibing ICT principles and techniques.

1.4 STATEMENT OF THE PROBLEM

The world is in a state of flux, being influenced by the forces of globalization and fast technological changes and as a consequence firms are facing intense competition. To face the challenges and explore the opportunities, firms are going for inorganic growth through various strategic alternatives like mergers and acquisitions (M&A), strategic alliances, joint ventures etc. The M&A are arguably the most popular strategy among firms who seek to establish a competitive advantage over their rivals. There are various reasons behind firms going for mergers and acquisitions. The M&A deals are common not only in the developed countries but also have become more apparent in the developing countries. In the pre-liberalization period, in India, the phenomenon recorded and upsurge in the wake of liberalization measures resulting into lessening the government controls, regulations and restrictions whereupon the corporate houses got freedom to expand, diversify and modernize the operations by resorting to mergers, takeover etc. With increasing competition and the economy heading towards globalization, mergers, acquisitions are expected to occur at a much larger scale than any time in the past and have played a major role in achieving the competitive edge in the dynamic market environment. While financial services and communication services were leading in the M&A race there were many M&A deals in the banking sector as well and hence the study.

1.5 SIGNIFICANCE OF THE STUDY

Economic liberalization today has created a sense of urgency among companies resulting in an acute significance of examining the effect of corporate restructuring and change initiatives on the organizational performances. As a result, a great number of studies on M& A have been undertaken both in India and worldwide. Existing literature on the M&A activity among merged banks reveals certain lack of empirical research in India with regard to the impact of M & A on the banking companies both on a long term and short term basis by using event study methodology. Furthermore, the study focuses on the performance of banks with the application of CAMELS rating of merged banks in India. It has not been made so far. In addition, today, more than ever, employees are regarded as the greatest assets for any organization and therefore, the perception of the employees on any organizational initiatives is important and crucial. This is because of the fact that when employees feel that the changes aroused out of M&A activity may breach their psychological mindset which may inadvertently affect the reputation of the firm among its employees and consequently resulting in reduced performance.

No empirical study has been made so far on the perception of the employees about the M&A activity in the Indian Banking Industry, it is therefore significant enough to undertake study on the factors influencing the perceptions of the employees about the M&A process undertaken by their organization. This attempt would invariably be a source of information for the managers and business leaders of any merging organization to understand the relative significance of the process and the resultant impact of it on employees, performance, profitability and organizational sustainability as a whole.

1.6 OBJECTIVES OF THE STUDY

This study aims to analyze the following objectives;

1. **To analyze the pre and post-merger performance of banks who underwent M&A deal during the post-financial sector reform period, that is from**

   1993-94 – 2004-05.

2. **To identify the reaction of security prices to announcement of Mergers/acquisitions decision of the study units**
3. **To understand employees' perception about the implications of mergers in the Merged banks**

1.7 HYPOTHESES OF THE STUDY

To substantiate the objectives of the study mentioned above, the following hypotheses were formulated and tested by applying relevant test. :

H_1: There is no difference in liquidity position of the merged banks before and after merger (with respect to Current Ratio, Quick Ratio and Cash Asset Ratio)

H_2: There is no difference operational performance of the merged banks before and after merger (with respect to WCT Ratio, AT Ratio and FA Ratio)

H_3: There is no difference in profitability position of the merged banks before and after merger (with respect to GPM, OP ratio, RON, NP ratio and ROCE)

$H_{4:}$ There is no difference in abnormal returns of the merged banks before and after announcement period under both MM & MAM

H_5: There is no difference in cumulative abnormal returns of the merged banks before and after announcement period under both MM & MAM.

$H_{6:}$ There is no difference in the perception of employees on the pre- merger activities and post-merger activities

$H_{7:}$ There is no difference in the perception (mean score) of employees of public and private sector banks

1.8 METHODOLOGY OF THE STUDY

It is an empirical study undertaken to analyze the performance of the merger banks that had gone for structural change during the post financial sector reform period in India. A comprehensive analysis on three dimensions of M & A Deal was undertaken to meet the objectives of this empirical study. It has been made by collecting relevant secondary data from the CMIE database pertaining to the operating performance, share price and market index of the merged banks and also derived the employees' perceptions. The researcher has confined his study only to 8 merged banks during the period 1993-1994 end 2004-2005 for the final analysis, discussion and inferences. The researcher has restricted the selection of merged banks up to 2004-05 in order to analyze the post merger performance at least for a period 3 years and 5 years. A briefing about objective-wise methodology is given below:

1. To analyze the pre and post-merger performance of banks who under went M&A deal during the post-financial sector reform period, from 1993-94 – 2004-05

Performance of the merger banks during the pre and post merger period was reviewed with the secondary information cited from CMIE data base through which analyzed the efficacy of those merger deals. CAMELS' rating scanning has also been done to derive efficacy of M&A Deal.

Data Collection

Secondary data on performance for merged banks was extracted for 3 year before and after (short run performance) as well as 5 year before and after (long run performance).

Data Analysis

(i) Pre and post-merger operating performance ratios of selected study units were computed and compared. These data were analyzed for trends and patterns in terms of performance ratios for a definite period of time frame (in the short term and long term period). Comparison on the various ratios between pre and post merger period of three and five years time intervals were compared using parametric t-test.

(ii) Uniform financial institutions rating system popularly called as CAMELS as advocated by Basel I & II norms has been also been used to measure the post merger performance of selected banks during the period of 2005-06 to 2011-12.

2. To identify the reaction of security prices to announcement of mergers and acquisitions decision.

Subsequently, secondary information on the reactions of stock price on those merged banks was reviewed again from CMIE to understand trends and patterns stock price for discussion.

Data Collection

Data on share price and market index were extracted. Both these extraction were done from the prowess database of Centre for Monitoring Indian Economy (CMIE).

Data Analysis

The impact of Merger and Acquisition in banking industry on Shareholders' wealth as well as on firm performance have been evaluated using share price data and financial statements of the select public and private sector banks. The extracted data was empirically analyzed based on Abnormal Return (AR) and Cumulative Abnormal Returns (CAR) arrived at using Market Model (MM) and Market Adjusted Model (MAM).

To **estimate the abnormal** return for security 'i' at time't', **Market model and Market adjusted model** were used.

The traditional market model to estimate abnormal returns is:

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \varepsilon_{i,t}$$

The abnormal return for each day for each firm is then obtained as

$$AR_{i,t} = R_{i,t} - (\hat{\alpha}_i + \hat{\beta}_i R_{m,t})$$

Another model, called marked adjusted model has been used to estimate abnormal returns to further check the sensitivity of our results. According to this model, the market return is simply subtracted from the correspondent security return over a given period 't' as given below:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

This approach makes the assumption that the beta for all firms (securities) is 1 (and α_i = 0), thus providing an extreme test of the sensitivity of the results to beta estimation or shifts.

3. To understand employee's perceptions about the implications of mergers in the banking industry

A well structured interview schedule was prepared to measure the perceptions of the employees of the merged banks, who have been experiencing changes as pertinent both before and after the merger announcement. It consists of two sections. The first section consisted of the job demographic details and the second consisted of 14 statements measuring the perception of employees. 5-point likert scale was adopted for this individual statements and notified as, '1' for "strongly disagree", '2' for "disagree", '3' for "neutral" (Neither disagree nor agree), '4' for "agree" to '5' for "strongly agree".

Data Collection

A questionnaire was distributed to 124 employees, who have been working with 8 merged banks during pre and post merger period in the UT of Pondicherry from among total 248 of employees who are working with bank even before M & A deal took place. Having the edited the interview schedule received, 100 respondents were identified as duly completed responses. The collected data was subsequently entered into SPSS for data analysis and conclusion generation.

RELIABILITY ANALYSIS

To analyze the reliability of questionnaire items used in this study, Cronbach's alpha was used with the following results. Pre-merger scale incorporates five items on nervousness, communication, information, objectives, employees believe. Post Merger integrates the 14 items covering work place changes, orientation, employees feeling, frustrated, stressed, uncomfortable, role clarity, recognition, feedback, suggestion, career, positive approach, financial motivation, new environment etc.,. Alpha ranged from 0.7 to 0.95, which is a satisfactory level. According to Nunnally (1994) a scale of alpha > 0.7 is considered reliable.

Below table summarizes these results

Constructs	**No. of Items**	**Alpha**
Pre merger	5	0.76
Post merger	14	0.87

Data Analysis

The primary data collection has been done among the employees of the selected banks by adopting Quota Sampling Technique from among the selected banks. The attitude of the bank employees about "before merger" and "after merger" activities were gathered by using a well-defined interview schedule. The collected data were subjected to descriptive analysis first (Mean and Standard deviation). The **mean level of attitude of the respondents is compared across groups by socio-economic characteristics using t-test and one way ANOVA (F test).** In a nutshell, this empirical study attempted to understand **both institutional performance as well as employee's perception about the banks performance during the merger process.**

1.10 LIMITATIONS OF THE STUDY

1. This study has been conducted in the banks and therefore the findings cannot be compared and generalized against other industrial sectors.
2. All the limitations associated with various tools like Ratio analysis, Mean, Standard deviation and T-Test, may affect the richness of this work.
3. There is an acute deficiency with reference to the studies on Mergers and an acquisition in India which may have its impact in the CMIE Data base, from where the researcher has collected the secondary data.

1.11 CHAPTER SCHEME

The report of the study is presented in seven chapters.

1. The first chapter entitled introduction and design of the study is presented with corporate restructuring, M&A in Indian industry, M&A in banking industry, statement of the problem, significance of the study, objectives of the study, hypotheses of the study, methodology of the study, limitations of the study and chapter scheme.
2. The second chapter entitled review of literature classifies the literature on M&A into International studies and Indian studies.
3. The third chapter entitled "M&A – A Conceptual and Contextual Overview" presents the conceptual overview of the study in terms of forms of corporate

restructuring, mergers and acquisitions, types of merger, risks associated with mergers, rationale for mergers, legal framework, major aspect of SEBI guidelines, takeover time, procedural aspects of mergers, tax aspects, approval of Reserve Bank of India and historical perspectives of banks M& A

4. The fourth chapter entitled "Pre and post merger performance of selected merged banks" presents the results of the study in terms of liquidity position- current ratio, quick ratio, and cash ratio; operational performance- working capital turnover ratio, asset turnover ratio and fixed asset ratio; profitability position- gross profit margin, operating profit margin, net profit margin, return on net worth, and return on capital employed; overall financial position and CAMELS ratings performance.
5. The fifth chapter entitled "Stock price reactions of the merged banks – a event study approach" presents the results of the study with respect to the abnormal and cumulative abnormal returns both under market model (MM) and market adjusted model (MAM) of merged banks.
6. The sixth chapter entitled "Implications of mergers – a perceptional study" presents the results as demographic profile, employees' perception during pre-merger and post-merger period, perceptions of employees by age, gender, designation, marital status, educational status, job experience, annual income, family type and bank type.
7. The seventh chapter presents the summary of the entire study, suggestions, conclusions and scope for future research.

Appendices

Appendix A:Interview Schedule

Appendix B:Articles published

1. Stock price reaction of the merged banks – An event study Approach (IJRCM)

2. Implications of merger: A Perceptional Study (JBFSIR)

Bibliography

CHAPTER II

REVIEW OF LITERATURE

2.1 International Studies

2.2 Indian Studies

Conclusion

More than ever, today mergers and acquisitions is an area of immense research potentials to both academicians and practicing managers for over three decades. Economic globalization has created a sense of urgency among companies resulting in an acute significance of examining the effect of corporate restructuring and change initiatives on the organizational performances. Studies on M& A in India suggest a wider framework for understanding the implications of merger from varied perceptions. There have been numerous studies on mergers and acquisitions abroad, in the last four decades. An extensive review of literature has been carried out in order to enhance the present level of understanding in the area of mergers and acquisitions, gain insight into the success of failure of mergers and formulate the problem for further research in this area. Broadly, literature review has been done on empirical studies in books, journals, published paper etc., these are discussed in detail in the following paragraphs of this chapter

2.1 International Studies

Hearly et al. (1992)[1] examined the post-merger cash flow performance for 50 largest US mergers and concluded that the operating performance of merging firms improved considered following acquisitions, in comparison with their industries, in the five years following mergers. The study observed that the development in post-merger cash flows was not attained at the expense of the merging firms' long-term viability, since the sample firms maintained their capital expenditure and Research and Development (R&D) rates in relation to their industries. The study also suggested that the increase in industry-adjusted operating returns could be attributable to an increase in asset turnover rather than an increase in operating margins.

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[1] Hearly P M, Palepu K G and Ruback R S (1992) "Does Corporate Performance Improve After Merger?" Journal of Financial Economics, Vol.31,pp. 135-175.

Berger and Humphrey (1994)[2] reported that most studies that examined pre-merger and post-merger financial ratios found no impact on operating cost and profits ratios. The reasons for the mixed evidence are: the lag between completion of merger process and realization of benefits of mergers, selection of sample and the methods adopted in financing the mergers. Further, financial ratios may be misleading indicators of performance because they do not control for product mix or input prices. On the other hand they may also confuse scale and scope efficiency employed frontier X-efficiency gains. Recent studies have explicitly employed frontier X-efficiency methods to determine the X-efficiency benefits of banks mergers. Most of the US based studies concluded that there is considerable potential for cost efficiency benefits from bank mergers (since there exists substantial X-inefficiency in the industry), "but the data show that on an average, such benefits were not realized by the US mergers of the 1980".

Studies tracking shareholder returns for every large, publicly traded North American acquirer in the 1990s showed that only 44 per cent of deals initiated by these companies yielded superior investor returns. On average, acquirers underperformed their respective industries by 3 per cent. Banking deals in the United States performed even worse. Only 18 per cent of acquirers provided superior returns to shareholders. Consolidators underperformed the total return index for their industry by an average of 13 per cent during the three years following deals – their shareholders were 13 per cent worse off than if they had simply held a bank industry portfolio mirroring the index.

Huzifa Husain (2000)[3] explained that takeovers (hostile or non-hostile) may be beneficial to the shareholders if they help unlock the hidden value of a company. Take overs also help the existing management to be more receptive to shareholders. Economically, takeovers make sense if the 'Private Market Value' of a company is higher than the market capitalization of the company. Further, if takeovers are used as a ploy to competition it becomes harmful for the economy. Therefore, proper checks

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[2] Berger, AN and Humphrey (1994) Bank scale economics, mergers, Concentration, and efficiency: The U.S. experience, center for financial institutions working papers 94-25, Wharton School center for financial Institutions, Univeristy of Pennsylvania.

[3] Huzaifa Husain, (Dec 2000), "M & A : Unlocking Value", Chartered Financial Analyst, Vol. VI.No. IV. 65-66.

and balances have to put in place to ensure that takeover facilitation is more to improve overall efficiency of the economy

Ted Lindblom & Christopher von Koch (2002)[4] study demonstrated how the growth strategy behind the merger of the two banks may be organized within the framework of a balanced scorecard highlighting the strategic fit between them. The findings of the study imply that the strategic fit was of a complementary nature. The banks were complementing each other rather well in the different perspectives of the model. The authors suggest that the success of the merger will therefore very much depend on the capability of cross-utilizing the different characteristics and strengths of the merging banks.

Said Elfakhani, Rita F. Ghantous & Imad Baalbaki (2003)[5] study utilized the event study approach to analyze the mega-mergers that took place in the banking industry during 1998, namely that of Travelers Group with Citicorp, NationsBank with BankAmerica, and Bank One with First Chicago NBD. A test of daily abnormal returns was conducted to find out the impact of each of the three mergers on shareholders' wealth from both the acquired and acquirer's perspective. The results obtained indicated that the market's reaction was positive during the on-event sub-period (i.e. days 0 and 1) for both the acquired and acquirer in the Travelers-Citicorp merger; only for the acquirer in the NationsBank-BankAmerica deal, and for the acquired firm in the case of Bank One-First Chicago NBD merger.

Ramaswamy, K.P. and James F. Waegelein, (2003)[6] study using a sample of 162 firms and industry-adjusted cash flow returns on market value of assets as performance criteria, examined the financial performance of the combined target and acquiring firms over a 5-year post-merger period in relation to the corresponding pre-merger period. The study found that post-merger performance is negatively associated

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[4] Ted Lindblom & Christopher von Koch, (2002). Cross-Border Bank Mergers and Acquisitions in the EU, The Service Industries Journal , Volume 22, Issue 4, pp. 41-72

[5] Said Elfakhani, Rita F. Ghantous& Imad Baalbaki, (2003). Mega-mergers in the US banking industry, Applied Financial Economics , Volume 13, Issue 8, pp. 609-622.

[6] Ramaswamy, K.P. and James F. Waegelein, (2003). Firm Financial Performance Following Mergers, Review of Quantitative Finance and Accounting, 20: 115–126.

with relative target size and positively associated with long-term incentive compensation plans.

Ya-Hui Peng & Kehluh Wang, (2004)[7] study suggested that economies of scale and scope exist at small and medium-sized banks. Meanwhile, government-owned or controlled banks are the most cost efficient. Non-performing loans increase the inefficiency of the banking sector in the sample study was just under 10 per cent. The study further observed that bank merger activity is positively related to cost efficiency. The authors posit that mergers can enhance cost efficiency, even though the number of bank employees does not decline. Generally, the banks involved in mergers are generally small and were established after the banking sector was deregulated.

Abhay Abhyankar, Keng-Yu Ho & Huainan Zhao, (2005)[8] studied the long-run post-merger stock performance of UK acquiring firms using the idea of stochastic dominance. The authors compared the performance using the entire distribution of returns rather than only the mean as in traditional event studies. The study found that, in general, acquiring firms do not significantly under-perform in three years after merger since no evidence of first- or second-order stochastic dominance relation between acquirer and benchmark portfolios is observed. It was also observed that acquirers pay excessively large premiums and overpayment is a possible reason for post-merger underperformance. In general, the results of this study again underline the importance of examining long-run post-merger stock performance from alternative perspectives.

Fotios Pasiouras & Chrysovalantis Gaganis (2007)[9] examined the financial characteristics of 52 targets and 47 acquirers that were involved in acquisitions in the Asian commercial banking sector over the period 1998 to 2004 and a control sample

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[7] Ya-Hui Peng & Kehluh Wang, (2004). Cost efficiency and the effect of mergers on the Taiwanese banking industry, The Service Industries Journal, Volume 24, Issue 4, 2004, pp. 21-39.

[8] *Abhay Abhyankar, Keng-Yu Ho & Huainan Zhao, (2005). Long-run post-merger stock performance of UK acquiring firms: a stochastic dominance perspective, Applied Financial Economics, Volume 15, Issue 10, pp. 679-690.*

[9]. Fotios Pasiouras & Chrysovalantis Gaganis, (2007). Financial characteristics of banks involved in acquisitions: evidence from Asia, Applied Financial Economics, Volume 17, Issue 4, pp. 329-341.

of non-merged banks matched by country and year. Three logistic regression models were estimated to determine the factors that influence the probability of being involved in an acquisition either as a target or as an acquirer. The results indicated that more asset risky portfolios increase this probability. Higher liquidity also increases the probability of being acquired. The probability of being involved in an acquisition as acquirer also increases with size and cost efficiency. Finally, more profitable banks are more likely to be involved in acquisitions as acquirers rather than as targets.

Franz R. Hahn (2007)[10] investigated the performance of the Austrian banks who have participated in a domestic in-market merger operation from 1996 till 2002. Using data envelopment analysis (DEA) methodology in combination with a Tobit model to account for the variation of the productive efficiency scores due to external determinants such as in-market merger operations, the study found the evidence supporting the view that banks which participated in domestic in-market merger operations attain a higher productive efficiency level than banks which did not participate in such operations. The study also indicated that the merger gains remain significant over a longer period of time (more than five years) but show a slight tendency to level off.

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[10]. Franz R. Hahn, (2007). Domestic mergers in the Austrian banking sector: a performance analysis, Applied Financial Economics , Volume 17, Issue 3, pp. 185-196.

Mark Walker, M. & Chi-Sheng Hsu (2007)[11] study observed that an acquiring firm's strategic objective and post-acquisition stock price performance are determined, at least in part, by the industry's outlook and structure, and by the acquiring firm's market position. The authors suggests that acquiring-firm managers are more likely to acquire a related target firm when the industry outlook is favourable, the four-firm concentration ratio is low, and the firm is a major competitor. Related acquisitions by industry leaders are the most successful in terms of increasing acquiring-firm shareholder wealth. However, the study did not find any evidence about acquiring firms gaining competitive advantage systematically over rival firms, when the rival firms are classified by size and competitive position.

Betania Tanure and Roberto Gonzalez-Duarte, (2007)[12] case study involving the ABN AMRO Bank case explained to what extent the successful integration of the acquired banks by the acquiring one was determined by the consistency among three factors: the determining reason for the acquisition; the integration strategy adopted; and the HRM policies for the management of people. The study observed that in processes of radical change, such as acquisitions, the top management of the acquiring company, has a critical role of establishing an understanding that people constitute, in fact, a key asset of the company, thereby opening avenues for HRM to assume a strategic role within companies.

Brian Diepold, Robert M. Feinberg, David K. Round & Jeremy Tustin (2008)[13] in their work focused on a sample of about 50 mergers and acquisitions involving Australian companies from 1996 to 2003, examining the impact on share prices of the announcement of these mergers both on the firms involved and on rival firms. The study found little evidence of share price response to mergers, and the authors argue that clearly represent a much more significant event, both to announced

[11]. Mark Walker, M. & Chi-Sheng Hsu, (2007). Strategic objectives, industry structure and the long-term stock price performance of acquiring and rival firms, Applied Financial Economics, Volume 17, Issue 15, pp. 1233-1244.

[12]. Betania Tanure and Roberto Gonzalez-Duarte, (2007). Managing people in radical changes (M&As): The adoption of intrinsically consistent HRM strategies in Brazilian companies, International Journal of Manpower, Vol. 28 No. 5, 2007, pp. 369-388.

[13] Brian Diepold, Robert M. Feinberg, David K. Round & Jeremy Tustin, (2008). Merger Impacts on Investor Expectations: An Event Study for Australia, International Journal of the Economics of Business, Volume 15, Issue 1, pp. 45-62.

mergers and to associated antitrust challenges. The study also presented evidence that cross-border impacts on share price returns appear to be less favorable than domestic mergers.

David Cummins and Xiaoying Xie, (2009)[14] study estimated the cost and revenue efficiencies based on accounting data for US P–L insurers using data envelopment analysis, the market-value response to acquisitions and divestitures using a standard market model event study and regression analysis was used to measure the relationship between abnormal returns (dependent variable) and efficiency (independent variable), along with a set of control variables. The results showed that acquirers, targets and divesting firms all have significant positive abnormal returns around announcement dates. The authors are found that efficient acquirers and targets have higher cumulative abnormal returns (CAR) but inefficient divesting firms have higher CARs.

Ahmad Ismail, Ian Davidson & Regina Frank (2009)[15] study among European banks investigated post-merger operating performance for 35 publicly listed bank mergers that were completed between 1992 and 1997. The study found that industry-adjusted mean cash flow return did not significantly change after merger but stayed positive. It was also found that the merger led to a significant decrease in profitability and capitalization and an improvement in cost-efficiency ratios, although the improvement was not large enough to offset the profitability decrease. The authors suggested that low profitability levels, conservative credit policies and good cost-efficiency status before merger are the main determinants of industry-adjusted cash flow returns and provided the source for improving these returns after merger.

Jens Hagendorff, Kevin Keasey, (2009)[16] study examined the type of operational strategies adopted by banking firms in the years following a deal in the USA and Europe. The study compared the design and performance implications of

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[14] David Cummins, J. and Xiaoying Xie, (2009). Market values and efficiency in US insurer acquisitions and divestitures, Managerial Finance, Vol. 35 No. 2, 2009, pp. 128-155.

[15] Ahmad Ismail, Ian Davidson & Regina Frank, (2009). Operating performance of European bank mergers, The Service Industries Journal , Volume 29, Issue 3, 2009, pp. 345-366.

[16]. Jens Hagendorff, Kevin Keasey, (2009). Post-merger strategy and performance: evidence from the US and European banking industries, Accounting and Finance, Vol.49, pp. 725–751

different post-merger strategies in both geographical regions using accounting data. It was found that European banks pursue a cost-cutting strategy by increasing efficiency levels vis-a` -vis non-merging banks and by cutting back on both labour costs and lending activities. US banks, on the other hand, raised both interest and non-interest income in the post-merger period.

Sheng-Yung Yang, Lin Lin, De-Wai Chou & Hsiao-Chen Cheng (2010)[17] observed that firms with good stock performance are more likely to acquire other firms. With 412 US-listed bidders, results from the event study method clearly supported this hypothesis by showing a strong upward movement of cumulative abnormal returns across groups in the pre-merger period. Results also suggested that bidders of different characteristics have different preference for payment methods and thus the market reactions to them are different, despite the noise that frequently accompanies merger activity. These empirical outcomes are important to both investors and financial services companies including investment banks when knowledge about the market reactions to their clients in mergers is required.

Jeungbo Shim (2011)[18] study found that acquirers' financial performance decreases and earnings volatility increases during the gestation period after the M & A due to increased frictional costs associated with post-merger integration and agency problems. The study observed that more focused insurers outperform the product-diversified insurers, implying that the costs of diversification outweigh the benefits. The study also found that marginal increases in commercial line share are associated with higher risk-adjusted profits, but these gains are offset by the extra costs from product diversity when its initial share is low. The authors suggested that for insurers initially concentrated in commercial line, a marginal increase in commercial line share is related to higher performance due to positive effects of both direct exposure and indirect focus.

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[17] *Sheng-Yung Yang, Lin Lin, De-Wai Chou & Hsiao-Chen Cheng (2010). Merger drivers and the change of bidder shareholders' wealth, The Service Industries Journal, Volume 30, Issue 6, pp. 851-871.*

[18] Jeungbo Shim, (2011). Mergers & Acquisitions, Diversification and Performance in the U.S. Property-Liability Insurance Industry, Journal of Financial Services Research, 39, pp.119–144.

2.2 Indian Studies

Kaveri V.S. (1986)[19] studied the financial performance of a sample of nine sick units and focused on their expectations from the mergers. The study hypothesized that the performance of the sick company should improve after the take and the same cannot be achieved if the takeover has not taken place. Though the author has attempted to study the cases on nine companies, the study could not yield conclusion for generalizing the phenomenon.

Malay K.Roy (1989)[20] attempted to study takeovers from a corporate finance approach. Broadly the study considers different methods of valuation of shares in the context of takeovers, mode of financing an acquisition and its impact on capital structure and risks of the firms, impact of acquisition on the EPS and impact of mergers on share prices. However, the case included in the study is not uniform and tried to depend much on secondary data.

Raghunathan.V. et.al (1991)[21] in his work titled the new economic package and the agenda for restructuring the financial sector by discussed the emerging issues relating to new economic policy on the financial sector. This article strongly argued that agenda for restructuring the financial sector include the integration of various financial markets, new instruments required for hedging risk, measures for investor protection, appropriate legislation, relevant tax reforms, development of financial infrastructure and the roles of regulatory agencies.

Beena P.L. (2000)[22] attempted to analyze the significance of mergers and its characteristics. The paper suggested acceleration of the merger movement in the early 1990s is accompanied by the dominance of mergers between firms belonging to the same business group or house with similar product lines.

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[19] Kaveri, V.S. (1986), Financial Analysis of companies Mergers in India, Himalaya Publishing House.

[20] May K. Roy, (1996), Takeover: A Corporate Finance Approach, Unpulished ICSSR project study.

[21] Raghunathan, V. et.al (1991). "The New Economic Package and the Agenda for Restructuring the Financial Sector", Vikalpa.Vol.l .No.16, pp.3-11.

[22] Beena.P.L. (2000). "An Analysis of Mergers in the Private Corporate Sector in India" (working paper No.301). Centre for Development Studies, Thiruvananthapuram

Canagavally, R. (2000)[23] studied the efficiency of mergers measured the performance in terms of size, growth, profitability and risk of the companies before and after merger. The dissertation also investigated the share prices of sample companies in response to announcement of merger.

Malhotra, I.S. (2000)[24] in their article entitled 'Mergers, Amalgamations, Acquisitions and Absorptions' stated that in order to sustain, an organization must grow over a period of time. An organization is said to have failed when it has stopped growing. Growth is very necessary for sustenance. It is, thus imperative for the top management to be alert and recognize the signs of failure at an early stage for timely remedial measures, the author warns. The author summarized the strategies for mergers followed in the past as well as the strategic to be followed in the future.

Gopinath Rao, T. (2001)[25] study on the strategies for preventing hostile takeover discussed the scenario of hostile takeovers plaguing indicate corporates. The important aspects like the legal framework for takeovers, mechanisms for takeovers etc., were examined in that study.

Ajay Pandey (2001)[26] study in the context of developed countries has consistently pointed out the substantial valuation gains for target firms, particularly in case of successful takeovers. The study tested whether takeovers are seen by capital market as creating value to the firm by its improving performance. The authors suggested that a consequence of change in management or a mere replacement of existing management without any expectation of concomitant improved managerial

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[23] Canagavally .R. (2000). "An Evaluation of Mergers and Acquisitions", M.Phil Dissertation (unpublished) Pondicherry University, Pondicherry

[24] Malhotra.I.S. (2000), "Mergers, Amalgamations, Acquisitions and Absorptions", Productivity Promotion Journal, Vol. 4. No. 17-18, 71-87.

[25] Gopinatha Rao.T. (2001). "Strategies for Preventing Hostile Takeovers- A Critical Case Study", M.Phil. Dissertation (Unpublished). Alagappa University. Karaikudi

[26] Ajay Pandey (2001). "Takeover Announcements, Open Offers, and Shareholders' Returns in Target Firms",

Vikalpa The Journal for Decision Makers,(July- September) .Vol.26. No.3. pp.19

35.Aloke Ghosh (2001), "Does Operating Performance really Improve following Corporate acquisitions?" Journal

of corporate Finance, Vol.7, pp.151-178.

and firm performance by assessing the impact of open offer announcement on target firms' stock returns has been followed in this study.

Aloke Ghosh (2001)[27] compared the pre and post-acquisition operating cash flow performance of merging firms for three years merger, with control firms based on pre-acquisition performance data of target and acquiring firms for pre-acquisition years. The study found that the merging firms have systematically outperformed industry –median firms over pre-acquisition years and once the superior pre – acquisition performance was accounted for, there was no evidence of improving in the operating performance of acquiring firms following acquisitions.

Bhatnagar, R. G. (2001)[28] study explored a heavy toll on the public sector banks plagued by NPA tainted balance sheets and burdened with the flab of endless bureaucratic interventions of the past. In the increasingly competitive industry, well managed, highly popular and innovative sectors banks are giving the PSBs a run for their money. The author offers a solution through merger and streamlined operations.

Pawaskar (2001)[29] analyzed the pre-merger and post-merger operating performance of 36 acquiring firms during 1992-1995, using rations of profitability, growth, leverage and liquidity, and found that the acquiring firms performed better than industry average in terms of profitability. Regression analysis however, showed that there was no increase in the post-merger profits compared to main competitors of the acquiring firms

Prasad P S R and Sreenivas V. (2001)[30] in their study highlighted the need for mergers in banking industry and discussed various aspects involved in mergers of Indian banks. The authors observed that merger of banks is still viewed as the only alternative left to avoid other hard choices and suggested the role of planners and supervisors of the merger process to have a smooth transition.

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[28]. Bhatnagar.R.G. (2001). "Merger Lies the Salvation Treasury Management

[29] V.Pawaskar (2001) "effect of mergers on corporate performance in India" , Vikalapa, Vol.26, No1. Jan.-March,pp 19-32

[30] Prasad P S R and Sreenivas V. (2001)26 in their study 'Mergers of Indian Banks Issues Involved',IBA Bulletin,27-30.

According to **Sangita Mehta (2001)**[31], major financial institutions of India like IDBI, IFCI and ICICI etc., are in a restructuring phase. These institutions are shunned by the bourse because all face the problems of rising non-performing assets and high fund cost. The author points out that government interference and disparity in pay scales are the hindering factors towards restructuring.

Sughir Chowdhary (2001)[32] study explored the importance of size and scale. As the technological advancements have increased, companies have felt the need to expand their territories. At the same time, there is a need for policy regulators to recognize the reality to conciliate technological compulsions and policy constraints. The author viewed that the biggest advantage of the BPL- BATATA merger is in the area of roaming services. It can slash prices as it is sharing infrastructure.

Surjit Kaur (2002)[33] compared the pre- and post-takeover performance of a sample of 20 merging firms, using a set of eight financial ratios, for a period of three years each, immediately preceding and succeeding the merger. The study found that Gross Profit Margin (EBITDA/Sales), Return on Capital Employed (ROCE) and Asset Turnover Ratio Declined Significantly in the Post-takeover period, suggesting that both profitability and efficiency of merging companies declined in the post-takeover period. However, the change in post-takeover performance was statistically not significant when't' test was used.

Swaminathan (2002)[34] studied a sample of five merger cases during 1995-96, and found that four of the five acquiring firms improved operating and financial synergies (measured through certain financial ratios) three years after the merger. While the Net Profit Margin significant improved post-merger, the asset turnover did not show any significant change-the study concluded that shareholder value improved for the mergers of smaller companies, but not for those of large companies.

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[31]. Sangita Mehta (2001), "The writing on The Wall", Proessional Banker, 1.6.40-41

[32] Sudhir Chowdhary. (2001),"Cellular Phone Service:The Call of Merger",Effective Executive Journal,Vol. III, No. 8, pp. 53- 55.

[33] Surjit Kumar (2002), "A study of corporate takeovers in India", Ph.D. thesis abstract Submitted to University of Delhi, pp.1-11.

[34] Swaminathan S (2002), Indian M&As: why they have worked So Far", Indian Management, pp. 72-77. Times Research Foundations, Pune

Aloke Ghosh (2004)[35] study on the increasing market share as a rationale for corporate acquisitions based on a global based survey found that managers and board of directors consider gaining market share as the single most important reason for M & A deals. The author tested and found that acquiring firms with a high pre-acquisition market share acquire other firms to further increase market share, which creates value for equity holders of merging firms.

Amit K. Rathi (2004)[36] examined the common reasons for pitfalls and remedies of M&A suggested some possible solutions to avoid common mistakes during and after M&A. The author posited that in today's dynamic economic environment, the job of management is to maximize shareholder value. But most of the mergers and acquisitions add no value to the partners over time if done without proper planning, analysis and study as suggested by most top managers responded in that study.

Hariharan. P.S (2005)[37] studied the pitfalls in mergers, acquisition and takeovers observed that most acquisitions happens in haste and repent at leisure. The main reason was attributed to not having a framework for acquisition policy, poor strategic fit, cultural and social differences, inefficient due diligence, ego clash, and failure to follow – up and rank misplaced optimism are some of the major causes of merger failures.

Adrian Gourlay, Geetha Ravishankar, Tom Weyman-Jones (2006)[38] study on efficiency gains from bank mergers in India found that bank mergers in the post reform period possessed considerable potential efficiency gains stemming from harmony gains. In this study, post merger efficiency analysis of the merged bank with a control group of non-merging banks reveals an initial merger related efficiency

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[35] Aloke Ghosh. (2004). "Increasing Market Share as a Rationale for Corporate Acquisitions", Journal of Business Finance & Accounting, 31. 1 & 2, 209-247.

[36] Amit K. Rathi (2004) "M&A: Common Pitfalls and Remedies" The Management Accountant, Dec., 2004, pp. 952-958.

[37] Hariharan, P.S (2005) "Pitfalls in Mergers, acquisition and Takeovers" (A-Z of Mergers Failures) the management accountant, Oct. 2005, pp. 763-77

[38] Adrian Gourlay, Geetha Ravishankar, Tom Weyman-Jones (2006) "Non-Parametric Analysis of Efficiency Gains from Bank Mergers in India" Department of Economics, Loughborough University, Loughborough

advantage for the former that, while persistent, did not show a sustained increase thus failing to provide the merging banks with a competitive advantage vis-à-vis their non-merging counterparts.

Ram Kumar Kakani and Jay Mehta, (2006)[39] examined the motives for mergers and acquisitions in the Indian banking sector through the international mergers & acquisitions scenario comparing it with the Indian scene. Give the increasing role of the economic power in the turf war of nations, the paper looks at the significant role of the state and the central bank in protecting customer's interests vis-à-vis creating players of international size. While, gazing at the mergers & acquisitions in the Indian banking sector both form an opportunity and as imperative perspectives, the paper also glances at the large implicative, the paper also glances at the large implications for the nation.

Rajesh Kumar, B and Prabina Rajib (2007)[40] study on the characteristics of merging firms in India analyzed the distinctive financial characteristics of the acquirer and the target firms in the period of merger. In addition, the empirical challenge is to determine the measurable factors that make a firm attractive as a takeover target. The fundamental research focus is on the characteristics that make a firm an acquirer and on identifying those characteristics of a firm, which will have a significant impact on the probability that firms will be acquired. The study suggests that smaller firms with lower price-earning ratio are more likely to be acquired. The acquired firms may also be undervalued by the stock market. There is possibility that the acquirer firms with higher price-earning ratios may get instantaneous gains form acquisitions of low P/E targets due to the market's tendency to value the combined firm at the acquirer's original price.

Brinda Jagirdar and Amlendu K Dubey (2007)[41] study examined the performance of public sector banks found that paper private banks and foreign banks

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[39] Ram Kumar Kakani , Jay Mehta, (2006) " Motives for Mergers and Acquisitions in the Indian Banking Sector – A Note on Opportunities & Imperatives" SPJCM Working paper 06-13(Nov.)

[40] Rajesh Kumar, B and Prabina Rajib (2007) "Characteristics of Merging Firms in India: An Empirical Examination" Vikalpa. Vol.32 No 1 . Jan – Mar. 2007 PP. 27 -44

[41] Brinda Jagirdar and Amlendu K Dubey (2007) " Performance of Public Sector Banks –An Econometric Analysis" The Indian Banker Vol II No. 12 Dec. 2007 PP.26-34

were not superior to the PSBs in any of the performance indicator namely ROA, OPR, NIM and OER, given the present regulatory environment. This is surprising to note given the priori expectation that foreign or private banks (especially new private sector banks) are more profitable or efficient than PSBS. The findings also contradicted hypothesis that government enterprises per se are inefficient. There are, however, certain limitations of observed in that study such as data used were only of two years 2004-2005 and 2005-2006. The study also reported that the introduction of banking and financial sector reforms in the country, there has been a significant improvement in the financial health of commercial banks, particularly PSBs, in terms of capital adequacy, profitability and asset quality as well as greater attention to risk management. The study also observed that PSBs as a whole have improved their performance in recent years.

Pramod Mantravadi & Vidyadhar Reddy (2007)[42] study on the operating performance after mergers and acquisitions examined both pre-and post-merger financial ratios, with chosen sample firms, and all mergers involving public limited and traded companies of the nation between 1991 and 2003. The research suggested that there were minor variations in terms of impact on operating performance following mergers in different intervals of time in India. The study also indicated that for mergers between the same group of companies in India, there has been a deterioration in performance and return on investment, suggesting that such, mergers were only motivated by potential for increasing the asset through consolidation of different businesses, rather than driving efficiency improvements.

Siddhartha S Brahma and Kailash B L Srivastava (2007)[43] study examined the moderating influence of integration. Where there is a high possibility of executive departure, high integration may prove costly to the acquire, In this circumstance, the acquirer should avoid integrating the target until proper actions are taken to retain talents. Communication is equally important where the acquirer desires to fully

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[42] Pramod Mantravadi & A Vidyadhar Reddy (2007) "Mergers and Operating Performance Indian Experience" The Icfai Journal of Mergers Acquisitions, Vol. IV, No, 4, 2007, PP. 53 -66.

[43] Siddhartha S Brahma and Kailash B L Srivastava (2007) "Communication, Executive Retention and Employee Strees as Predictors of Acquisition Performance: An Empirical Evidence" The Journal of Mergers & Acquisitions, Vol. IV, No.4, 2007 PP.7- 2521.

integrate the acquired firm. Adequate communication with the acquired staff will have a positive effect on performance. Thus, a proper planning regarding these variables before going for integration is highly advisable to the managers.

Varsha Virani (2007)[44] study on the impact of mergers and acquisitions on private sector banks in global economy argues that corporate restructuring have become strategies for growth, consolidated and convergence. There are however, challenges as well. This study examined the merger of the Time Bank with HDFC and Bank of Madura with ICICI Bank concluding that effect on the net profit end equity value consequent to the merger. The author argues that merger is only one of the alternatives for restructuring the financial sector and that there could be more advantageous options to leverage optimum utilization of corporate resources. The author suggests that in all fairness, India Inc. seems to be well set to achieve greater heights in the future, as never before.

Amitabh Gupta (2008)[45] study on the market response to merger announcements studied the stock price performance of target companies in case of merger announcements in India during the period January 31, 2003 to January 31, 2007. The study found significant positive returns on the date of the announcement. A run up in prices to the date of announcement was also seen, which indicated that the market had prior knowledge of the impending merger. During the 30 days before the merger date, returns were found to be positive for 20days compared to negative returns on only 10 days. However, after the announcements of merger, there was a reversal in the pattern of returns, as positive returns were seen for a smaller number of 13 days compared to negative returns on 17 days. The study also observed that the returns gained prior to the merger were lost immediately after the announcement.

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[44] Varsha Virani (2007) "Impact of Mergers and Acquisitions on private Sector banks in Global Economy" Mergers and Acqusitions. Oct. 2007, PP. 47 – 50.

[45] Amitabh Gupta (2008) "Market Response to Merger Announcements" The Icfai Journalof Applied Finance,Vol.14, No.8, 2008.

Beena, S (2008)[46] attempted to find out whether the process of mergers and acquisitions are really contributing to the changes in the level of concentration in this industry. For the study, the author used an exclusive database on mergers and acquisitions in the pharmaceutical industry and applied multiple least square regression frameworks to assess the impact. The findings indicated that mergers and acquisition have a major role in changing the market structure of the sample industry studies and pointed the need for a proper integration of pharmaceutical policy and competition policy.

Manoj Anand and Jagandeep Sing (2008)[47] studied the impact of mergers announcements on shareholders wealth among Indian private sector banks by capturing the returns to share holders as a result of the merger announcements using the event study methodology. The study observed that merger announcements in the Indian banking industry had positive and significant shareholder wealth effect both for bidder and target banks. The market value weighted CAR of the combined bank portfolio as a result of merger announcement was 4.29 % in a three day period (-1,1) window and 9.71% in a 11-day period (-5,5) event window.

Ramakrishnan, K (2008)[48] examined the long-term post-merger performance of firms in India on a sample of 87 domestic mergers validated the hypothesis. The author argued that the efficiency appears to have improved post-merger lending synergistic benefits to the merged entities. Synergistic benefits appear to have accrued due to the transformation of the hitherto uncompetitive, fragmented nature of Indian firms before merger, into consolidated and operationally more viable business units. This improved operating cash flow return is on account of improvement in the post-merger operating margins of the firms, though not of the efficient utilization of the assets to generate higher sales.

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[46] Beena, S (2008) "Concentration Via Consolidation in the Indian Pharmaceutical Industry; An Inquiry" The Icfai University Journal of Mergers & Acquisitions, Vol. V, No.4, 2008, PP. 51 – 70.

[47] Manoj Anand and Jagandeep Sing (2008) "Impact of Mergers Announcements on Shareholders' Wealth: Evidence from Indian Private Sector Banks" Vikalpa. Vol. 33 No.1 January-March 2008 PP.35-54.

[48] Ramachandran, A & Kavitha. N (2008) "Financial Performance of New Private Banks With Other Bank Groups in the Banking Industry" Indian journal of Finance. August, 2008 PP. 33- 38.

Remya RM (2008)[49] observed that cross-border mergers and acquisitions (M&A) have always kept the interest of economists alive. The new business environment has provided and opportunity for Indian companies to go global through M&A. The authors suggest that M&A in India are on the rise with volumes increasing in 2008 as compared to 2007 and earlier years. Apparently, M&A have been found to be beneficial leading to cost cuts and increased revenues. However, failures are not uncommon either.

Sarangapani and Mamathaa (2008)[50] examined some large Indian M&A deals were studied. The intent of the study was to understand the strategic intent behind M&A activity by analyzing the recent M&A in India. Intents of M&A using anecdotal evidence gathered from public statements of top management personnel in the media were analyzed. The data can be corroborated through collecting primary data from specific companies involved. This study can be furthered with a more detailed study of the M&A intents-either (including investments, analysts and consultants). Issues related to taxation and regulations are not within the scope of this work, as data related to these were not available in the public domain. The propositions developed can be further tested over large sample sizes and temporally validated after three to five financial years. This can pave the way for a more detailed understanding of the corporate strategies of Indian firms, especially in times when more and more industries are maturing, leading to consolidation of players.

Conclusion

From the review of literature, it is observed that Indian industry has witnessed a spurt in the number of corporate restructuring exercises particularly in the post-liberalization period. The possible reasons for restructuring of business and models by the Indian corporate increases competition both globally and domestically, improve the core competencies, debt equity restructuring to reduce high interest obligations, to cope up with the funds constraints or utilization of excess funds, reduce time over-run costs, downsizing and reducing the number of organizational layers for increasing the

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[49] Remya (2008) “Mergers and Acquisitions More Gain, some Pain”

[50] Sarangapani. A and Mamathaa (2008) “Strategic Mergers and Acquisitions in Indian Firms – A Study” ” ICFAI READER (Special Issue) Mergers & Acquisitions June 2008 PP.42-60.

operational efficiency, growth and entry into new markets, for corporate tax benefits, automatic approval for FDI in companies, new industrial licensing policy or government policy decisions, to enhance shareholders value or to improve the share prices of the company, etc.

Literature about mergers among Indian banks is limited largely been due to the paucity of published case material and the confidentiality associated with this activity. From the existing literature, it was observed that major studies focused on performance and the resultant implications of M&A. Most importantly, in an industry where "size" determines sustenance ability, the merger should place the banks on a better footing. Today, more than ever, merger in the Indian banking sector have gained considerable momentum for achieving consolidation. In limited, there exists limited research examining the financial ratio such as liquidity ratio, probability ratio and turnover ratio for appreciating and understanding the real performances of the merged banks.

Secondly, as very few studies have looked in to examining the effect of merger on the shareholders' value, the researcher attempted to elicit the reaction patterns of the investors after the announcement of the merger and its resultant impact on the shareholder value in the short as well as longer term by adopting event study methodology. Finally, studies examining the employee's perceptions of merged banks are hardly done in the India banking industry till date. As the employees are very vital link in stabilizing the advantage of any strategic initiatives at the firm's level, this study was also extended to analyze the perception of employees of merged banks.

CHAPTER III

M & A CONCEPTUAL AND CONTEXTUAL OVERVIEW

Over the 1980s and 1990s, companies across the globe have engaged in restructuring activities. As controls and restrictions gave way to competition and free trade, restructuring and reorganization became an essential attribute of business activity and an integral part of the new economic paradigm.[1] Bowman and Singh (1989) posit restructuring to a significant and rapid change in one or more of three dimensions: assets, capital structure or management. Restructuring usually involves major organizational change such as shift in corporate strategies to meet increased competition or changed market conditions.[2] It can also take place eternally through mergers and acquisitions (M & As) by which a firm may acquire anther firm or by forming joint ventures with other firms. A growing body of research indicates that corporate restructuring generates value for shareholders, and recent empirical evidence points to improvements in operating performance as a primary source of these gains.

In India, the process of economic liberalization and globalization created a state of flux in business activity demanding Indian companies to restructure their operations. Mergers, acquisitions, takeovers, collaborations, consolidation, diversification, etc. became the order of the time. Domestic firms have taken steps to consolidate their position to face increasing competitive pressures and MNCs have taken this opportunity to enter Indian corporate sector.[3] Parallel to this strategic direction, restructuring also emerged as a dominant feature in research and literature.

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[1] www. Scribd.com/Tata group going through M &A (Read only)

[2] Bowman.E.H./singh,h., Corporate restructuring reconfiguring the firm, strategic Management journal,14 special Issue,1993.15-31

[3] www.scribd.com /doc/538448051/corporate restructuring page no.1-5

3.1 Forms of Corporate Restructuring

The different forms of corporate restructuring are summarized in Figure 1.2.

Forms of Corporate Restructuring

1. Expansion

- Mergers
- Acquisitions
- Tender Offers
- Joint Venture

2. Sell – Offs

- Divestitures
  *Equity carve-outs
- Spin-offs
  *Split- offs
  *Split-ups

3. Corporate Control

- Premium Buy – Back
- Standstill Agreements
- Anti Takeover Amendments
- Proxy Contest

4. Changes in Ownership Structure

- Exchange Offers
- Share Repurchase
- Going Private
- Management Buyouts
- Leveraged Buyouts

Expansion

Mergers are like a marriage in the romantic tradition. Usually there is a period of courtship leading to the joining of two or more separate entities into one, after which the parties hope to live happily ever after. Expansion consists of mergers, acquisitions, tender offers and joint ventures.

a) Merger

A merger refers to combination of two or more companies into one company where one survives and the others lose their corporate existence.

b) Acquisition

Acquisition in general sense is acquiring the ownership in the property. In the context of business combinations, an acquisition is the purchase by one company of a controlling interest in the share capital of another existing company.

c) Tender Offer

Under tender offer, one party, generally a corporation seeking a controlling interest in another corporation, asks the stockholders of the firm it is seeking to control, to submit, or tender, their shares of stock in the firm.

d) Joint Ventures

Joint ventures involve the intersection of only a small fraction of the activities of the companies involved and usually for a limited duration of years. They may represent a separate entity in which each of the parties makes cash and other forms of investment.

Sell-Offs

Sell – offs comprises of divestitures and spin – offs.

a) Divestitures

Divestiture involves the sale of a portion of the firm to on outside third party. The diverting firm receives cash or equivalent consideration. The buyer is an existing firm, so that no new legal entity results. It simply represents form of expansion on the part of the buying firm and include equity carve out

Equity Carve – Out

Equity Carve – out is another variation of divestitures. It involves the sale of a portion of the firm via an equity offering to outsiders. New share of equity are sold to outsiders, which give them ownership of a portion of the previously existing firm.

b) Spin–Offs

A spin – off creates a separate new legal entity. Its shares are distributed on a pro–rate basis to existing shareholders of the parent company. Thus, existing shareholders have the same proportion of ownership in the new entity as in the original firm. It includes split – offs and split – ups.

Split-Off

A split – off is another variation of the spin – off. A portion of the existing shareholders receives stock in a subsidiary in exchange for parent company stock.

Split–Up

Under split – up the entire firm is broken up in a series of spin – offs, so that the parent no longer exists and only the new off spring survive.

Corporate Control

The third category of grouping activities is referred to as "corporate control". It embraces of premium buybacks, standstill agreements, anti – takeover amendments and proxy contests.

a) Premium Buy – Back

Premium buybacks represent the repurchase of a substantial stockholders ownership interest at a premium above the market price.

b) Standstill Agreements

A standstill agreement is written in connection with buybacks. It represents a voluntary contract, which the stockholder who is bought out agrees not to make further attempts to takeover the company in the future. When a standstill agreement is made without buyback, the substantial stockholder simply agrees not to increase his ownership, which presumably would put him in an effective control position.

c) Anti – Takeover Amendments

Anti – takeover amendments are changes in the corporate byelaws to make an acquisition of the company more difficult or more comprehensive. These include:

- Super majority voting provisions requiring a high percentage (f.g: 80%) of stockholders to approve merger.
- Staggered terms for directors which can delay change of control for a number of years, and
- Golden parachutes that award large termination payments to existing management if control of the firm is changed and management is terminated.

d) Proxy Contest

An outside group in a proxy contest seeks to obtain representation on the firm's board of directors. The outsiders are referred to as 'dissidents' or 'insurgents' who seek to reduce the control position of the 'incumbents' or existing Board.

Changes in Ownership Structure

A change is ownership structure represent the fourth group of restructuring activities. It encompasses exchange offers, share repurchases, going private and leveraged buy- outs.

a) Exchange Offers

Exchange offers may be the exchange of debt or preferred stock for common stock.

b) Share Repurchase

It means that the corporation buys – back some fraction of its outstanding shares of common stock. Tender offers may be made for share repurchase. If the percentage of shares purchased is substantial, the effect may be to change the control structure in the firm.

c) Going Private

Under going private transaction, the entire equity interest in a public corporation is purchased by a small group of investors. The firm is no longer subject to regulations of SEBI and/ or stock exchanges. Going private transactions typically include members of the incumbent management group who obtains a substantial proportion of the equity ownership of the newly private company.

d) Management Buyouts

If in a going private transaction, the incumbent management initiates the transaction, it is referred to as a management buy-out.

e) Leveraged Buyouts

When financing from third parties are arranged by a small group of outside investors for providing funds and for securing representation on the private company's Board, in a going private transaction, it is referred to as leveraged buy-outs.

Among the different forms corporate restructuring, M & A has got its significance and widely preferred options of corporate. A detailed account about M & A is given below.

3.2 Mergers and Acquisitions

In this era of intense and turbulent change, involving rapid technological advances and ever increasing globalization, combinations also en-able organizations to gain flexibility, leverage competencies, share resources, and create opportunities that otherwise would be inconceivable. Worldwide acquisition activity hit an all-time record high in 2006 of $3.79 trillion (Thomson Financial, 2007). In 2004, 30,000 acquisitions were completed globally, equivalent to one transaction every 18minutes. The total value of these acquisitions was $1,900 billion, exceeding the GDP of several large countries[4]. M&As are indispensable strategic tools for expanding product portfolios, entering new markets, acquiring new technologies and building new generation organizations with the power and resources to compete on a global basis. Today, more than ever, mergers and acquisitions are emerging as an important means through which companies across the globe achieve economies of scale, remove inefficient management, or respond to economic shocks and India is no exception in this context.

In India, there has been a significant growth in mergers and acquisitions activity since the 1990s. The early M & As in India was arranged either by the government agencies or by the financial institutions within the framework of a regulated regime. However, since 1991, Indian industries have been increasingly exposed to both domestic and international competition and competitiveness has become an imperative for survival. Hence, in recent times, companies have started restructuring their operations around their core business activities through M & As. Significantly, the result of deregulation and other economic drivers of financial sector integration have created an unprecedented wave of mergers and acquisitions (M&As) in the banking industry.

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[4] Susan Cartwright and Richard Schoenberg, Thirty Years of Mergers and Acquisitions Research: Recent Advances and Future Opportunities, British Journal of Management, Vol. 17, S1–S5 (2006)

The pressure of competition pushed banks into searching for ways to widen their geographical reach and range of products, with a view to achieving economies of scale and scope and improving their efficiency through restructuring and consolidation activities resulting in a flux of M&A activity. The effects of consolidation on banks and the banking market as a whole have been extensively researched. It is generally accepted that mergers can result in overall benefits due to increased efficiency from economies of scale and scope, cost reductions through elimination of redundancies, reduced earnings volatility through diversification, or revenue enhancement through increased market power. Performance improvement can be achieved in several ways. If the management of the acquiring institution is superior to that of the target, then higher levels of performance may be attained by improving the quality of management. Benefits may also be achieved when a more efficient institution is created through the elimination of redundant facilities and personnel or through offering a more profitable mix of products and services. Finally, increased market power may raise performance.

3.3 Types of Merger

Mergers may be horizontal, vertical or conglomerate.

- A horizontal merger is a combination of two or more firms in a similar type of production, distribution or area of business.
- A vertical merger is a combination of two or more firms involved in different stages of production or distribution.
- A conglomerate merger is a combination of firms engaged in unrelated lines of business activity. Furthermore, these may be friendly or hostile.

Horizontal Merger

A horizontal merger represents a merger of firms engaged in the same line of business (i.e.) producing the same goods or offering the same services. Ex: Associated Cement Company. A horizontal merger can take any of the following forms:

a) Complementary merger,
b) Competitive merger, and
c) Geographical merger.

a) Complementary Merger

Under this form a merger between companies that has proven expertise in different fields take place Example: bank ABC that is proficient in money market operations mergers with Bank XYZ renowned for treasury operations

b) Competitive Merger

This is merger between companies that share common field of specialization. This type of merger may even create apple monopolistic situation that field. For instance, when two manufacturing industry that are market leaders in Forex business merge into a single entity and consequently eliminate all competition and get apple stranglehold.

c) Geographical Merger

This is a merger between companies having presence in two different regions. Example: Manufacturing sector XYZ having presence in northern region merges with Manufacturing Sector ABC that has strong presence in southern region to increase their market share.

Vertical Merger

A vertical merger represents a merger of firm engaged at different stages of production in an industry (i.e.) manufacturing different products but having customer supplier relationship wherein the product of one company is used as raw material by the other company.

Conglomerate Merger

A conglomerate merger represents a merger of firms engaged in unrelated lines of activities (i.e.) a completely different industry with no important common factors between them in production, marketing, research and development or technology.

In any type of merger of listed companies, parties like shareholders, the creditors, the employees, the government through monopoly commissions, the lending financial institutions, the stock exchanges, high courts, etc… get involved.

3.4 Risks Associated with Mergers

Mergers have untold benefits but there are many risks associated with the process. The important risks are elaborated below:

- Mergers are often followed by losses and tough intervening periods before the eventual profits pour in. Patience, forbearance and resilience have to be sown in maple measure to make a merger a success story. All may not be upto the task and this explains a high failure rate in mergers.
- The structure, the systems and the procedures followed in the two entities may be vastly different. A through systems analysis requires lot of cautious applications. This is a time consuming systems analysis has to be done.
- When two entities merge into one then there is an inevitable increase in the size of the organization. Big may not always be better as the size may get too unwieldy and go beyond the control of management. The increased size may become a drag rather than an asset.
- There is a lot of hype, publicity, expectations and negotiations involved in a merger. Therefore, the stakes are high and if things turn sour, a demerger will involve very exorbitant opportunity costs. Therefore, mergers are one-point decisions involving an ultimate point of no return.
- Mergers come about due to decision making from the top management. The hierarchical order of the employees may not be the same in both entities. This leads to problems of industrial relations, deprivation, depression and de-motivation among the employees.

3.5 Rationale for Mergers

The principle economic rationale of a merger is that the value of the combined entity is expected to be greater than the sum of the independent values of the merging entities. It is possible to categorize the motivations into four dimensions.

- Cost benefits in the form of economic of scale, organizational efficiency, funding costs and risk diversification
- Revenue benefits in the form of economic of scale, enhancing monopoly rents

- Economic benefits such as mergers after crises or after the upswing of the business cycle; and
- Other motives such as private managerial benefits, defense against take-over, etc.

There are various reasons for taking up merger activity such as quest for synergy, tax considerations, economies of scale, diversification, etc. They are briefly discussed below:

Synergy

The primary motivation for most of mergers is to increase the value of the combined enterprise. Synergistic effects can arise from two sources:

a. **Operating economies:** It can be seen by looking at the branch network and the customer base.
b. **Financial economic:** It can be known by looking at the price- earnings and cost of debt.

Tax Considerations

It is true that tax considerations have stimulated a number of mergers. A profitable firm in the highest tax bracket could acquire a firm with large accumulated tax losses. These losses could then be turned into immediate tax savings rather than carried forward and used in the future. Also, mergers can serve as a way of minimizing taxes when disposing of excess cash.

Economies of Scale

Certain economies when two or more firms combine are realized due to the larger volume of operations of the combined entity. These economies arise because of more intensive utilization of production capacities, distribution networks, engineering services, research and development facilities, data processing systems, and so on.

Economies of scale are more prominent in the case of horizontal mergers where the scope for more intensive utilization of resources is grater. Under vertical mergers, the principle sources of benefits are improved coordination of activities, lower inventory levels, and higher market power of the combined entity. Even in the case of conglomerate mergers, there is scope for reduction or elimination of certain overhead expenses. There can even be diseconomies of scale if the scale of operations and the size of organization become too large and unwieldy.

Diversification

Diversification helps to stabilize a firm's earnings and thus benefits its owners. Stabilization of earnings is certainly beneficial particularly to employees, suppliers, and customers, but its value is less certain from the standpoint of stockholders.

3.6 Mergers and Acquisitions: Legal Framework

Merger and Acquisition activities must adhere to the existing legal regime, which provides the legal framework under which M&A activities can be undertaken. Most of the legal systems have been under review and are being reformulated in accordance with the emerging corporate scenario in India. This chapter highlights the salient points and the impact of various regulations, which have a bearing on M&A activities in India.

The legal procedures of the regulations of the various Acts to be adopted in M&A activities are discussed below:

1. The Companies Act- 1956,
2. Income Tax Act- 1961,
3. Indian Stamp Act, 1889,
4. MRTP Act- 1973, and
5. SEBI Guidelines.

1. Companies Act, 1956

The first major regulation is the Companies Act. It gives the general framework for M&A. The sections 391, 392,393,394, 395, 396, and 111 discuss the nature of coverage M&A activities. Let us discuss them:

Section 391: Under this section a company compromise or make an arrangement with its creditors or members. The court has the power to sanction or reject any such scheme of compromise or arrangement of M&A.

Section 392: The court has the power to give such directions in regard to any matter or make such modification in the compromise or arrangement, as it may consider necessary for the proper working of the scheme.

Section 393: This provides supportive provisions for compliance such as providing a statement that states the terms of compromise or arrangement and explaining its effect along with the notice calling the meeting. In case the notice is advertised, then it should specify the venue and the manner in which members attending the meeting can copies of the statement of compromise or arrangement.

Section 394: This section facilities reconstruction and amalgamation. The court may make provisions for the transfer of the whole or any part of the undertaking, property or liability of any transferor company to the transferee company.

Section 395: This section contains provisions for the compulsory acquisition by the transferee company of shares of the dissenting minority. The shares may be acquired on the same terms as those offered for the shares of the approving shareholders. However, this requires approval of not less than nine tenths of the value of the shares whose transfer is involved.

Section 396: This section outlines the power of the central government to provide for an amalgamation in national interest.

Section 111: The board of directors of corporate enterprise can refuse to register the transfer of shares in certain circumstances- under apprehension of takeover bids or corporate raids. The company can refuse to transfer the shares acquired by the acquirer. The company Law Board (CLB) has the power to decide on the matter.

2. Income Tax Act, 1961

Tax planning is an important component in M&A activities. There are two taxations-income tax and stamp duty- which may have an impact on the M&A activities. The important issues are given below.

One of the motives for mergers is the saving under Section 72A Income Tax Act. It is attractive for amalgamation of a sick company with a healthy and profitable one to take advantage of the carry forward losses. The conditions are:

- The amalgamating company is not financing viable by reasons of its liabilities, losses and other relevant factors immediately before such amalgamation.
- Amalgamation is in public interest.
- Any other conditions of the central government to ensure that the benefit under this section is restricted to amalgamations, which enable rehabilitation or revival of the business of the amalgamating company.

The major section affecting M&A activities is Section 73A of Income Tax Act. Section 72A of the Act has provisions for carry-forward and set-off of accumulated loss and unabsorbed depreciation allowances in certain cases of amalgamation. Guidelines for approval of amalgamation under Section 72A of Income Tax, 1961 have been issued.

The spin-off or hiving off of a particular unit to its wholly owned subsidiary has nil tax payment on transfer of assets. Other sections of relevance are given below.

Section 47(iv) states that any transfer of a capital asset by a subsidiary company to the holding company, if the whole of the share capital of the subsidiary company is held by the holding company or the holding company is an Indian company, is not treated as transfer.

Section 47A states that if at any time before the expiry of eight years from the date of transfer by the assets to the subsidiary, such capital assets are converted or treated by the subsidiary as stock in trade or the parent company ceases hold the whole of the share capital of the subsidiary, the profits or gains arising from such transfer not taxed earlier will be taxed. The gains are deemed to be income for the year previous to the one in which the transfer took place.

Section 50 states that an excess arising from the sale of depreciable capital asset gives rise to short-term capital gains. In case of parent company transfer the plant at an advanced stage of completion and has not claimed any depreciation, this becomes a short-term under Section 50.

Section 47(vi) allows transfer of capital assets by the amalgamating company to the amalgamated company. The pre-condition is that the amalgamated company should be an Indian company. The nature business transferred in a lump; all the assets and liabilities of the amalgamating company. It is not liable to pay income tax on the difference between the cost and book value of the stock in trade. India Income Tax Act, 1961,

3. Indian Stamp Act, 1889

In India, Gujarat and Maharashtra have a high rate of stamp duty on real estate transitions. They are the only states to levy stamp duty on mergers and amalgamations companies. Stamp duty is levied both by the union government and the state government. The Union Government levies under the Indian Stamp Act, 1889, on bill of exchange, share transfers, hundies, and letters of credit. The State Government levy stamp duty on sale and transfer of immovable on movable properties. Four states-Maharashtra, Gujarat, Karnataka and Kerala- have separate stamp acts. Other states Central Indian Stamp Act with some amendments.

4. SEBI Guidelines

The Securities and Exchange Board of India has issued detailed guidelines for regulating substantial acquisition of shares and takeovers of listed companies.[5] The important guidelines are as follows:

- **Notification:** The acquirer should intimate to the target company and the concerned stock exchanges as soon as its holding touches 5 percent of the voting capital of the target company.
- **Trigger Point for Public Offer:** No sooner the holding of the acquirer crosses 15 percent of the voting capital of the target company. It has to make an offer

[5] www.sebi.org.in

to purchase a minimum of 20 percent of the voting capital form the remaining shareholders through a public announcement.

- **Offer Price**: The offer price shall not be less than the highest of the following: negotiated price; average of the weekly high and low for the last 26 months.
- **Contents of the Public Announcement**: The public announcement shall inter alia provide information about the number of shares proposed to be acquired, the minimum offer price object of acquisition, dated by which letter after will be posted, and date of opening and closure of offer.

The purpose of SEBI guidelines is to impart greater takeover deals, ensure greater amount of disclosure through public announcement and offer document, and protect the interests of small shareholders.

3.7 Major aspects of SEBI's Guidelines

1. To amplify the definition of acquirer and 'persons acting in concert', to cover both direct as well as indirect Acquisitions. The definition of 'control' was modified to safeguard the shareholders' interest.
2. Mandatory public offer is triggered off when the threshold limit of 10 percent is crossed and there is a change in control.
3. For the purpose of consolidation of holdings, acquirers holding not less than 10 percent but not more than 51 percent are allowed 'creeping Acquisition' upon 2 percent will have to be in a transparent manner, through a public tender offer.
4. An acquirer, including persons presently in control of the company should make a public offer, to acquire a minimum of 20 percent in case, the conditions for mandatory public offer are valid.
5. SEBI would not be involved in the pricing of the offer, pricing will be based on negotiated price, average of high and low price for 26 weeks period, before the date of the public announcement, highest price paid by the acquirer for any preferential offers.
6. The concept of chain principle has introduced requiring a public offer to be made, to shareholders of each company when several companies are acquired through requisition of one company.

7. Disclosure requirements has been strengthened, requiring, disclosure of additional details of financial arrangements for implementing the offer and future plans of the acquirer for the target company. Disclosure of misleading information will be deemed a violation, attracting penal action. Non- exercise of due diligence will also attract penalties.
8. A conditional offer has been allowed, subject to either a minimum mandatory acceptance of 20 percent with differential pricing; or with a deposit of 50 percent of the value offer in cash in the escrow, in cases where the bidder does not want to be saddled with the 20 percent Acquisition.
9. Finally, the board of the target company during the offer period is precluded form inducting any person belonging to the acquirer or transfer shares in his name until all the formalities relating to the offer are complete.Under the revised takeover code, a mandatory public offer of 20 percent purchase will be targeted off, when the threshold limit of 10 percent equity holding is crossed. Those in control can however, purchase of 2 percent of share per annum, as long as their total holding is below 20 percent.

3.8 Takeover Time

The duration specified for M&A activities is given in Table-1.

Days	Actions
1	First public announcement Creation of escrow account
1-14	Offer documents filed with SEBI Offer conveyed to target company
1-21	Period within which competitive bids can be announced
21-35	Period within which original bid can be withdrawn
30	Last day that can be specified as the record date for an open offer
35-45	Mailing of the letter of offer to all shareholders
37	Last day for the target company to furnish a list of its shareholder
60	Last day for the bidder to open its offer to the shareholders
Days	**Actions**
102	Last day for revision of bids by competing bidders
105	Last day for closure of all offers, including competitive bids
135	Last day for completion of all official procedures

Source: Maitra 1996: 119.

3.9 Procedural Aspects of Merger

Analysis of merger proposal

As soon as a proposal for amalgamation or merger comes up the management of concerned companies should look into the pros and cons of the scheme. The likely benefits such as economic of scale, operational economies, improvement in efficiency, reduction in costs, benefits of diversification, etc. are to be clearly evaluated. The likely reactions of shareholders, creditors and other are also to be assessed. Besides the taxation implications are also studied. After going through the whole analysis work, it is seen whether the scheme will be beneficial or not. It is to be pursued further only if it will benefit the interested parties otherwise the scheme is shelved.

Determination of Exchange Ratios

The amalgamation or merger scheme involves exchange of shares debentures or preference shares or cash. The shareholders of merging companies are given shares of the merged company. It is very important that a rational ratio of exchange of share debentures, preference share should be decided. Normally a number of factors like book value per share, market value per share, potential earnings, value of assets to be taken over are to be considered for determining rational exchange ratios.

Examination of Object Clauses

The memorandum of association of both the companies should be examined to check if power to amalgamate is available. Further, the object clause of amalgamated company (Transferee Company) should permit it to carry on the business of the amalgamating company (Transferor Company). If such clauses do not exist, necessary approvals of the shareholders, boards of directors, and company law are required.

Approval of Board of Directors

After evaluating the merger scheme thoroughly and negotiating the exchange ratios, the proposal is to be put before the respective Board of Directors for approval.

Approval of Shareholders

According to section 391 of Indian Companies Act, 1956 the amalgamation scheme should be approval at a meeting of the members or class the of members, as the case may be, of the respective companies representing three-forth in value and majority in number, whether present in person or by proxies. In case the scheme involves exchange of shares, it is necessary that the scheme is approved by not less than 90% of shareholders of the transferor company to deal effectively with the discerning shareholders. Therefore, the merger scheme after the approval of respective Board of Directors must be put before the shareholders.

Filing the order with the Registrar

Certified true copies of the court order must be filed with the Registrar of Companies within the time limit specified by the court.

Transfer of Assets and Liabilities

After the final order have been passed by both the High Courts, all the assets and liabilities of the amalgamating company will, with effect from the appointed date, have to be transferred to the amalgamated company.

Consideration of Interest of the Creditors

According to section 391, amalgamation scheme should be approved by majority of creditors in numbers and three-fourth in value. Therefore, the view of creditors should also be taken into consideration.

3.10 Tax Aspects

Section 2(a) of the Income Tax Act defines amalgamation as follows: "Amalgamation" in relation to companies means the merger of one or more companies with another company or merger of two or more companies to from one company in such a manner that:

a. All the properties of the amalgamating company or companies just before the amalgamation become the properties of the amalgamated company by virtue of the amalgamation.

b. All the liabilities of the amalgamating company or companies just before the amalgamation, become the liabilities of the amalgamated company by virtue of the amalgamation; and

c. Shareholders holding not less three-fourth in value of the share in the amalgamating Company or companies become shareholders of the amalgamated company by virtue amalgamation. Having noted the definition of amalgamation under the Income Tax Act, let us consider the important tax provisions relating to amalgamation.

d. Depreciation: For tax purpose, the depreciation chargeable by amalgamated company has to be based on the written down value of the assets before amalgamation. For accounting (company law) purposes however, the depreciation charge may be based on the consideration paid for the assets.

Approval of the Court

After getting the scheme approved, an application is to be filed in the court for its sanction. The court will consider the viewpoint of all parties appearing, if any, before giving its consent, It will see that the interest of all concerned parties are protected in the amalgamation scheme. The court may accept, modify or reject an amalgamation scheme and pass orders accordingly. However, it is upto the shareholders whether to accept the modified scheme or not. It may be noted that no scheme of amalgamation can go through unless the Registrar of Companies sends a report to Court to the effect that the affairs of the company have not been conducted as to be prejudicial to the interests of its members or to the public interest.

Capital Gains Tax

No capital gains tax is applicable to the amalgamating company or shareholders if they get shares in the amalgamated company. Other Provisions:

Other relevant tax provisions are:

- The amalgamated company is liable to pay the taxes of the amalgamated company.
- Experiences of amalgamation are not tax-deductible.
- Taxes on the income of the amalgamating company, paid or payable, and income tax litigation expenses are tax-deductible expenses for the amalgamated company.
- Bad debts arising out of the debt of amalgamating company taken over by the amalgamated company are not deductible for tax purpose.
- The amalgamated company is entitled to get the refund of taxes paid by the amalgamated company.
- The carried forward long-term capital losses of the amalgamating company cannot be carried forward by the amalgamated company.

3.11 Approval of Reserve Bank of India

In terms of section 19 (1) (d) of the Foreign Exchange Regulation Act, 1973, permission of the RBI is required for the issue of any security to a person resident outside India. Accordingly, in a merger, the transferee company has to obtain permission before issuing shares in exchange of shares held in the transferor company. Further, Section 29 restricts the acquisition of the whole or any part of any undertaking in Indian in which non-residents' interest is more than the specified percentage.

3.12 Historical Perspectives of Banks Mergers

The major participants of the Indian financial system are the commercial banks, the financial institutions (FIs), encompassing term-lending institutions, investment institutions, specialized financial institutions and the state-level development banks, Non-Bank Financial Companies (NBFCs) and other market intermediaries such as the stock brokers and money-lenders. Mergers and acquisitions in Indian banking sector have initiated through the recommendations of Narasimham committee II. RBI was empowered in 1960, to force compulsory merger of weak banks with the strong ones. The total number of banks was thus reduced from 566 in 1951 to 85 in 1969.

In July 1969, government nationalized 14 banks having deposits of Rs.50 Crores & above. In 1980, government acquired 6 more banks with deposits of more than Rs.200 Crores. Nationalization of banks was to make them play the role of catalytic agents for economic growth. The Narsimham Committee report suggested wide ranging reforms for the banking sector in 1992 to introduce internationally accepted banking practices. The committee recommended that merger between strong banks/ financial institutions would make for greater economic and commercial sense and would be a case where the whole is greater than the sum of its parts and have a "force multiplier effect". (Narasimham committee II, chapter, para 5.13 -5.15).

Target Group of Banks for M&A

There are four categories of banks interested in M&A in a big way. First, there are banks (like Indian Bank) that have survived on the government's largesse in the form of thousands of crores of recapitalization bonds over the past decade. They are now keen to take over other banks to become strong and acquire widespread reach.In the second category are two types of banks. In one group are strong public sector banks with large domestic presence (like State Bank of India) that want to acquire a bank with an overseas presence to become global entities. The other group of banks increasing their domestic presence and reach. For instance, Bank of Baroda presence in western India – has started looking out for opportunities in the north, east and south. Vijaya Bank, which is based in Bangalore India major Punjab National Bank, headquartered in Delhi, is looking southwards.

In the third category, are "make banks headed by CEOs who were denied opportunities to head big banks and are believed to be taking the initiative to acquire other banks so that they can prove their leadership qualities. In the fourth category is a weak and small bank, which needs to be taken over by larger to remain viable. These can be the potential targets of foreign banks and investors. Over 90 per cent of private sector banks have a capital base of less than Rs 100 Crore (Rs 1 billion). Some of them even do not have a net worth of Rs 300 Crores.

Conclusion

To summarize, mergers and acquisitions have increasingly become an established feature of business life in the globalized environment. They enable companies to increase market share through product or service synergies or to expand into new markets by buying large players. The banking industry worldwide has been consolidating at a dramatic rate over the past 30 years, and this trend is ongoing. Significantly, a number of global players are emerging through successive mergers and acquisitions. Yet, key developments in the global banking industry in the last two years have been dominated by the subprime crisis and the liquidity problems that have followed from it. These problems have made financial institutions cautious about voluntary mergers and acquisitions.

The complexity of these scenarios creates acute interests and attention from theorists in several fields, such as financial economics, strategic management and organization theory. This study attempts to create framework to help us to understand mergers and acquisitions and resulting performance of banking industry as well as the management challenge that undermines its significance in this context.

CHAPTER IV

PRE AND POST MERGER PERFORMANCE OF SELECTED MERGER BANKS

4.1 Performance Analysis on merger Banks

- **A. Liquidity Position**
  - **A1. Current Ratio**
  - **A2. Quick Ratio**
  - **A3. Cash Asset Ratio**
- **B. Operational Performance**
  - **B1. Working Capital Turnover Ratio**
  - **B2. Asset Turnover Ratio**
  - **B3. Fixed Asset Ratio**
- **C. Profitability Position**
  - **C1. Gross Profit Margin**
  - **C2. Operating Profit Margin**
  - **C3. Net Profit Margin**
  - **C4. Return on Net Worth (RONW)**
  - **C5. Return on Capital Employed (ROCE)**
- **D. Overall Financial Position**

4.2 CAMELS Rating Performance

Conclusion

Mergers and acquisitions are used for improving competitiveness of companies and gaining competitive advantage over other firms through gaining greater market share, broadening the portfolio to reduce business risk and entering new markets. There are variations in terms of impact on performance following mergers, depending on the firm acquired – domestic or cross-border. In particular, mergers have had a positive effect on key financial and operational performance of firms acquiring domestic firms while a slightly negative impact on the firms acquiring cross-border firms.

Banking sector occupies a very important place in every economy and is one of the fastest growing sectors in India. The competition is intense and irrespective of the challenge from the challenge from the multinational players, domestic banks - both public and private are also seen rigorous in their pursuit of gaining competitive edge by acquiring or merging with potential opportunities as present today. As a result, Mergers and acquisitions are the order of the day. Indian commercial banks are witnessing sweeping changes in the regulatory environment, huge growth in off-balance sheet risk management financial instruments, the introduction of e-commerce and online banking, and significant financial industry consolidation. All of these forces have made the Indian banking industry highly competitive.

Therefore here an attempt has been made in this chapter to evaluate the performance of acquiring banks based on comparing key financial position indications before and after acquisition period of 3 year and 5 year. The researcher has used accounting ratios metrics viz., liquidity ratios, activity ratio and profitability ratios to elicit financial position of the banks during pre and post acquisition periods. Besides, CAMELS rating scanning has also been done to evaluate the efficiency of merger banks. The I Part of the analysis narrates the financial position of merger banks in terms of basic accounting ratios.

A. LIQUIDITY POSITION

Liquidity position of a bank could be measured in terms of various accounting ratios, such as current ratio, quick ratio and cash asset ratio indicate liquidity position of a acquiring banks. An acquiring bank is considered to be sound if it is in a position to carry on its business smoothly and meet all its obligations both long-term as well as short term without any damage to the goodwill of the bank.

A.1 Current Ratio

The current ratio is the most commonly used ratio for measuring liquidity position of the banks. It expresses the relationship between current assets and current liabilities. A higher current ratio shows that the bank is able to pay its short term obligation maturing within a year. From the management point of view, a higher current ratio is an indication of poor planning since an extensive amount of funds would lie idle.

On the contrary, a low ratio would mean inadequacy of working capital, which may later interfere with the smooth functioning of an enterprise. In a sound business, a current ratio of 2:1 is considered an ideal one. The results of t-test comparing the current ratio 3 year and 5 year pre and post acquisition period for acquiring firm are reported in Table 4.1.

The significant decline in 3 year average CR from pre to post acquisition period is also visible in the case of ICICI Banks' takeover of Bank of Madura ($t = 5.55$, $p < 0.01$). Though insignificant the 3 year mean CR in pre period has declined in post period due to acquisition of Times Bank, Global Trust Bank and Nedungadi Bank by HDFC Bank, Oriental Bank of Commerce (OBC) and Punjab National Bank (PNB) respectively.

On the other hand, there have been significant improvement in CR during 3 year in post period from its 3 year pre period level due to OBC's acquisition of Punjab Cooperative Bank as well as Bari Doab Bank Ltd) and State Bank of India's (SBI) acquisition of Kashinath Seth Bank.

Comparison of 5-year mean CR between pre and post event period shows a remarkable decline in CR against acquisition deal of BOB with Banaras State Bank ($t = 1.97$, $p < 0.10$), HDFC Bank with Times Bank ($t = 3.61$, $p < 0.01$), ICICI Bank with Bank of Madura ($t = 2.29$, $p < 0.05$), OBC with Global Trust Bank ($t = 2.09$, $p < 0.10$) and State Bank of India with Kashinath Seth Bank ($t = -3.58$, $p < 0.01$). However, there is no notable decline in 5-year CR between pre and post acquisition period in the case of OBC's takeover of Punjab Co-op Bank and Bari Doab Bank Ltd but the scenario is reverse in the case of OBC’s takeover of Global Trust Bank. In the case of takeover activity of SBI, there have been significant improvements in CR during 5 year after acquisition deal.

With regard to acquisition activities of BOB (Barelly Corporation Bank), OBC (Nedungadi Bank Ltd) and PNB, the 5 year mean CR remains same between pre and post period, indicating no improvement in the period of 5 year after acquisition activities.

Table 4.1
Current Ratio

Name of Acquiring Bank (Acquired Bank)	**3 Year**			**5 Year**		
	Pre	**Post**	t-value	**Pre**	**Post**	t-value
	Mean (SD)	**Mean (SD)**		**Mean (SD)**	**Mean (SD)**	
Bank of Baroda (Barelly Corporation Banks Ltd)	3.7100 (0.9443)	4.3233 (1.2081)	-0.69	3.4500 (0.7711)	3.6000 (1.3097)	-0.22
Bank of Baroda (Banaras State Bank Ltd)	4.4300 (1.1004)	2.5933 (0.1656)	2.86**	4.3580 (0.7897)	3.2420 (0.9898)	1.97*
HDFC Bank Ltd. (Times Bank Ltd)	3.3433 (1.7396)	1.4067 (0.4015)	1.88	4.5240 (2.0626)	1.0940 (0.5147)	3.61***
ICICI Bank Ltd. (Bank of Madura)	5.7333 (1.2716)	1.6067 (0.2074)	5.55***	4.1080 (2.4284)	1.6120 (0.1475)	2.29**
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	5.3333 (1.0825)	9.1933 (0.7346)	-5.11***	6.4920 (2.3223)	7.7640 (2.2634)	-0.88
Oriental Bank of Commerce (Global Trust Bank Ltd)	5.1767 (1.6231)	4.5167 (1.6383)	0.50	6.7560 (2.5014)	4.1200 (1.2921)	2.09*
Punjab National Bank (Nedungadi Bank Ltd)	3.2033 (0.9322)	2.4500 (1.3501)	0.80	3.9060 (1.2272)	2.8860 (1.1936)	1.33
State Bank Of India (Kashinath Seth Bank)	1.2967 (0.1050)	1.9067 (0.1401)	-6.03***	1.4140 (0.1906)	1.8140 (0.1610)	-3.58***

Source: Computed on the basis of CMIE Data Source.

Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level.

A2.Quick Ratio (QR)

The quick ratio, also called liquid ratio or acid test ratio, is ratio between quick or liquid assets and quick liabilities. This ratio is ascertained by comparing the liquid assets (i.e. assets which are immediately convertible to cash without much loss) with current liabilities. The prepaid expenses and investment are not taken as liquid assets. Generally speaking, quick ratio of 1:1 is considered satisfactory since a firm can easily meet all immediate claims.

Effect of acquisition activities of banks on quick ratio is evaluated by comparing 3 year and 5 year mean QR between pre and post merger period. The results of the comparative analysis are shown in Table 4.2.

According to Table 4.2, there have been a significant improvement in 3 year QR of OBC from 5.0433 times in pre period to 8.6533 times in post period against its takeover Punjab Co-op and Bari Daob Bank (t value = -4.44, $p < 0.01$). Similarly, the 3-year mean QR of SBI has increased significantly from 1.2333 times in pre period to 1.84 times in post period ($t = -6.22$, $p < 0.01$).

On the other hand, there have been significant decline in 3-year QR of ICICI bank between pre and post period for its takeover of Bank of Madura. With regard to takeover activities of BOB (Barelly Corporation Bank), HDFC, OBC (Global Trust Bank) and PNB, there is no any remarkable change in 3 year QR between two periods.

From perusal of the Table 4.2, it is understood that the change in 5-year QR between pre and post period vary slightly from change in 3 year QR against acquisition activities of banks. An increase in 5-year QR of OBC against its takeover of Punjab Co-op Bank and Bari Doab Bank Ltd has not been at remarkable level (t value for difference in QR is insignificant). On the other hand, decline in 5-year QR of OBC against its takeover of Global Trust Bank is found to be marginally significant (t value = 1.96, $p < 0.10$). Also, there have been significant decline in QR of HDFC against its acquisition of Times Banks from 4.4620 times in pre period to 1.0540 times in post period ($t = 3.49$, $p < 0.01$). At the same time, the change in 5-year QR of SBI between pre and post period against its acquisition activity is positive and significant at 1 per cent level ($t = -3.39$, $p < 0.01$).

Table 4.2
Quick Ratio

Name of Acquiring Bank (Acquired Bank)	**3 Year**			**5 Year**		
	Pre	**Post**	t-value	**Pre**	**Post**	t-value
	Mean (SD)	**Mean (SD)**		**Mean (SD)**	**Mean (SD)**	
Bank of Baroda (Barelly Corporation Banks Ltd)	3.4633 (0.9544)	4.0367 (1.1207)	-0.67	3.2440 (0.7490)	3.3340 (1.2485)	-0.14
Bank of Baroda (Banaras State Bank Ltd)	4.1533 (1.0020)	2.3800 (0.2000)	3.01**	4.0940 (0.7238)	3.0020 (0.9667)	2.02*
HDFC Bank Ltd. (Times Bank Ltd)	3.2400 (1.7762)	1.3600 (0.3928)	1.79	4.4620 (2.1225)	1.0540 (0.5037)	3.49***
ICICI Bank Ltd. (Bank of Madura)	5.7100 (1.2538)	1.4167 (0.2715)	5.80***	4.0940 (2.4120)	1.3760 (0.2007)	2.51**
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	5.0433 (1.1550)	8.6533 (0.8071)	-4.44***	6.2400 (2.3911)	7.2680 (2.1663)	-0.71
Oriental Bank of Commerce (Global Trust Bank Ltd)	4.8000 (1.4121)	4.3267 (1.6558)	0.38	6.2980 (2.3479)	3.9500 (1.2884)	1.96*
Punjab National Bank (Nedungadi Bank Ltd)	2.9167 (0.8545)	2.3767 (1.3211)	0.59	3.5940 (1.1709)	2.7800 (1.1564)	1.11
State Bank Of India (Kashinath Seth Bank)	1.2333 (0.0862)	1.8400 (0.1453)	-6.22***	1.3660 (0.2031)	1.7540 (0.1563)	-3.39***

Source: Computed on the basis of CMIE Data Source

Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

A3. Cash Asset Ratio

The cash asset ratio, sometimes called as cash ratio, is the ratio used to measure the liquidity of a firm and obtained by dividing all cash and cash equivalent assets with all current liabilities. The cash asset ratio is the most liquid of all assets against current liabilities, and is therefore seen as the most conservable of three liquidity ratios. This ratio indicates the extent to which a firm can pay its current liabilities without relying on the sale of inventory as well as without relying on the receipt of accounts receivables.

The mean Cash Asset Ratio for 3-year and 5-year in pre and post period of banks' acquisition activities are compared and the significance of the difference in pre and post period ratio is conducted with t-test.

An examination of the table 4.3 shows that the 3-year Cash Asset Ratio (CARAT) is during post event period is higher than that of pre event period for BOB's first takeover. Similar scenario is visible in the case HDFC also. But the above positive change in 3 year CARAT is not at mentionable level for both acquisition events.

The 3-year CARAT is almost similar between two periods in the case of acquisition activities of OBC (GTB) and PNB. At the same time, 3-year CARAT, 3.5937 times and 5.2385 times in pre event period, have significantly declined to 1.7962 times and 1.0017 times in post event period for BOB (Banaras Bank Ltd) (t value = 3.10, $p < 0.10$) and ICICI Bank (t value = 6.24, $p < 0.01$).

At the same time, there have been a marginal improvement in 3-year CARAT of OBC (Punjab Co-op / Bari Doab Bank) (t value = -2.45, $p < 0.10$ for OBC) and SBI (t value = -2.40, $p < 0.10$ for SBI) between pre and post event period due to their takeover activities.

Table 4.3
Cash Asset Ratio

Name of Acquiring Bank (Acquired Bank)	**3 Year**			**5 Year**		
	Pre	**Post**	t-value	**Pre**	**Post**	t-value
	Mean (SD)	**Mean (SD)**		**Mean (SD)**	**Mean (SD)**	
Bank of Baroda (Barelly Corporation Banks Ltd)	2.7857 (0.6453)	3.4928 (1.1219)	-0.95	3.2440 (0.7490)	3.3340 (1.2485)	-0.14
Bank of Baroda (Banaras State Bank Ltd)	3.5937 (0.9975)	1.7962 (0.1177)	3.10*	4.0940 (0.7238)	3.0020 (0.9667)	2.02*
HDFC Bank Ltd. (Times Bank Ltd)	0.3713 (0.6432)	1.1631 (0.4131)	-1.79	4.4620 (2.1225)	1.0540 (0.5037)	3.49***
ICICI Bank Ltd. (Bank of Madura)	5.2385 (1.1182)	1.0017 (0.3622)	6.24***	4.0940 (2.4120)	1.3760 (0.2007)	2.51**
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	4.4083 (1.1920)	6.1102 (0.1789)	-2.45*	6.2400 (2.3911)	7.2680 (2.1663)	-0.71
Oriental Bank of Commerce (Global Trust Bank Ltd)	3.9628 (1.1860)	3.5842 (1.2239)	0.38	6.2980 (2.3479)	3.9500 (1.2884)	1.96*
Punjab National Bank (Nedungadi Bank Ltd)	2.0413 (0.3940)	2.0084 (1.2604)	0.04	3.5940 (1.1709)	2.7800 (1.1564)	1.11
State Bank Of India (Kashinath Seth Bank)	0.6650 (0.1508)	1.2184 (0.3708)	-2.40*	1.3660 (0.2031)	1.7540 (0.1563)	-3.39***

Source: Computed on the basis of CMIE Data Source.
Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

From the comparative analysis of 5-year CARAT between pre and post event period, results of which is given in Table 4.3, it is apparent that except for acquisition activities of BOB with Barelly Corporation Bank, OBC with Punjab Co-op Bank / Bari Doab Bank Ltd and PNB with Nedungadi Bank Ltd, there have been significant change in 5-year CARAT between two event periods in respect of the other banks.

The change in 5-year CARAT is significant and negative for acquisition activities of BOB with Banaras State Bank Ltd (t value = 1.97, $p < 0.10$), HDFC bank with Times Bank (t value = 3.68, $p < 0.01$), ICICI Bank with Bank of Madura (t value = 2.55, $p < 0.05$) and OBC with Global Trust Bank (t value = 1.90, $p < 0.10$). On the other hand, the change in 5-year CARAT is significant and positive for takeover of Kashinath Seth Bank by State Bank India (t value = -4.48, $p < 0.01$).

Test of Hypothesis: 1

Ho: There is no difference in liquidity position of the merged banks before and after merger (with respect to Current Ratio, Quick Ratio and Cash Asset Ratio)

H1: There is difference in liquidity position of the merged banks before and after merger (with respect to Current Ratio, Quick Ratio and Cash Asset Ratio)

Conclusion: Reject Null Hypothesis because there is difference in liquidity position of the merged banks before and after merger (with respect to Current Ratio, Quick Ratio and Cash Asset Ratio)

B. OPERATIONAL PERFRMANCE

Activity Ratios

Activity ratios are financial ratios that measure how efficiently a firm is using its current and fixed assets to convert into cash, Firms will typically try to turn their resources into cash as fast as possible because this will generally lead to higher revenues. The ratios such as working capital turnover, asset turnover, etc are generally used to evaluate the activity of a firm. Here in this chapter, the activities of the public and private sector banks before and after their acquisition activities are evaluated using working capital turnover ratio, asset turnover ratio and fixed asset turnover ratios.

B1. Working Capital Turnover Ratio

The working capital turnover ratio establishes the relationship between net income and working capital. The working capital turnover ratio is used to analyze the relationship between the money used to fund operations and the income generated from these operations. In a general sense, the higher the working capital turnover, the better because it means that the bank is generating a lot of income compared to the money it uses to fund the sales. Efficiency utilization of the working capital in generating the cash can be ascertained with this ratio.

The results of t-test comparing 3-year working capital turnover ratio (WCTR) between pre and post acquisition period are reported in Table 4.4. According to table, the working capital turnover ratio is higher in pre acquisition period for Bank of Baroda with Barely Corporation Banks (Mean = 1.7703), Bank of Baroda with Banaras State Bank Limited (Mean = 1.9874), HDFC bank with Times bank (Mean = 1.4221) and ICICI bank with Bank of Madura (Mean = 2.4902) compared to working capital turnover ratio in post-acquisition period.

Table 4.4
Working Capital Turnover Ratio

Name of Acquiring Bank (Acquired Bank)	3 Year			5 Year		
	Pre Mean (SD)	Post Mean (SD)	t-value	Pre Mean (SD)	Post Mean (SD)	t-value
Bank of Baroda (Barelly Corporation Banks Ltd)	1.7703 (0.4390)	1.6734 (0.4370)	0.27	1.6380 (0.3609)	1.3211 (0.5732)	1.05
Bank of Baroda (Banaras State Bank Ltd)	1.9874 (0.2664)	0.8920 (0.1746)	5.96***	2.0004 (0.1969)	1.1832 (0.4329)	3.84***
HDFC Bank Ltd. (Times Bank Ltd)	1.4221 (0.6879)	0.5790 (0.5754)	1.63	1.6077 (0.6145)	-0.0155 (0.9179)	3.29***
ICICI Bank Ltd. (Bank of Madura)	2.4902 (0.4797)	1.1659 (1.3695)	1.58	1.7806 (1.0973)	0.9426 (1.0156)	1.25
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	1.4348 (0.3608)	1.5075 (0.3034)	-0.27	1.5964 (0.4331)	1.2801 (0.3791)	1.23
Oriental Bank of Commerce (Global Trust Bank Ltd)	0.8469 (0.1647)	1.3864 (0.5475)	-1.63	1.0776 (0.3857)	1.2545 (0.4272)	-0.69
Punjab National Bank (Nedungadi Bank Ltd)	0.9915 (0.3495)	0.9445 (0.8028)	0.09	1.1701 (0.3482)	0.9785 (0.5733)	0.64
State Bank Of India (Kashinath Seth Bank)	0.5760 (0.2068)	1.4007 (0.1112)	-6.08***	0.7133 (0.2523)	1.2504 (0.2212)	-3.58***

Source: Computed on the basis of CMIE Data Source

Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

On the other hand, the pre-period WCTR is less than that of post-period for Oriental Bank of Commerce's acquisition deal with Punjab Co-operative Bank and Bari Doab Bank Ltd (Mean = 1.4348 Vs 1.5075), Oriental Bank of Commerce with Global Trust Bank (Mean = 0.8469 Vs 1.3864), Punjab National Bank with Nedungadi Bank (Mean = 0.9915 Vs 0.9445) and for acquisition deal of State Bank of India with Kashinath Bank Ltd (Mean = 0.5760 Vs 1.4007).

However, the difference in WCTR between pre and post event period is found to be at mentionable level only for acquisition activities of Bank of Baroda (Banaras State Bank) (t-value = 5.96, $p < 0.01$) and State Bank of India (t-value = -6.08, $p < 0.01$). Hence, it is found that the acquiring Banaras State Bank tend to reduce the efficiency of the Bank of Baroda in respect to using working capital properly for generating income whereas the SBI's acquiring process increased its efficiency in term of turning working capital into earnings.

With regard to activities of acquiring banks in turning Working capital into income 5-year before and after acquisition event, it can be observed from the table 4.4 that during 5-year pre-period, WCTR is less for OBC (Global Trust Bank), and SBI and it is higher for the remaining banks.

The working capital turnover ratio even becomes negative for HDFC during 5-year post-acquisition period, in turn indicating that the banks have been in possession of required current assets to its current liabilities. The decline in WCTR during 5-year post-period is significant at 1 per cent level of BOB (t-value = 3.84, $p < 0.01$) and HDFC (t-value = 3.29, $p < 0.01$). Similarly, increase in WCTR from 5-year pre period to post-period is significant at 1 per cent level for SBI (t-value = -3.58, $p < 0.01$)

B2. Asset Turnover Ratio

The asset turnover ratio (Total asset turnover ratio) simply compares the turnover with the assets that the business has used to generate that turnover. In its simplest terms, we are just saying that for every rupee of assets, the turnover is 'X' rupees. Table 4.5 is presented with the results of t-test comparing 3-year and 5-year

Asset turnover ratio (ATR) between pre and post period for public and private sector banks' acquisition activities.

According to Table 4.5, 3-year pre-period ATR of 0.1128 times, 0.1021 times, 0.1052 times, 0.1126 times, 0.1069 times is significantly higher than post period of ATR of 0.1006 times, 0.0913 times, 0.0865 times, 0.0791 times and 0.0863 times for acquisition activity of Bank of Baroda with Barelly Corporation (t-value = 5.02, $p < 0.01$), Bank of Baroda with Banaras State Bank (t-value = 2.31, $p < 0.10$), HDFC Bank with Times Bank (t-value = 5.16, $p < 0.01$), Oriental Bank of Commerce with Global Trust Bank (t-value = 15.87, $p < 0.01$) and Punjab National Bank with Nedungadi Bank Limited (t-value = 3.92, $p < 0.01$) respectively.

On the other hand, ATR has increased to 0.1087 times in 3 year during post-period from 0.1071 times in 3 year during pre-period for Oriental Bank of Commerce against its acquisition of Punjab Co-operative Bank and Bari Doab Bank Ltd. The difference in ATR between two periods is significant at 10 per cent level (t-value = -2.43, $p < 0.10$). That is, efficiency in terms of converting their assets into earnings has declined after acquisition activities for most of the banks.

From the comparison of ATR between pre and post event period of 5 year, as per the table 4.5, it is understood that the decline in 5-year ATR during post-period is significant for Bank of Baroda acquiring Barelly Corporation Banks (t-value = 6.64, $p < 0.01$) and Banaras State Bank (t-value = 3.91, $p < 0.01$), OBC acquiring Global Trust Bank (t-value = 12.40, $p < 0.01$) and PNB acquiring Nedungadi Bank (t-value = 5.57, $p < 0.01$), which is similar to the one obtained for 3 year ATR. However, the decline in 5-year ATR for HDFC bank and an increase in it for OBC with Punjab Co-operative Bank and Bari Doab Bank Ltd is not significant statistically (which is significant for 3 year ATR). Hence, it is concluded that the efficiency in ATR for longer period is not as same as that of shorter period against banks' acquisition event.

Table 4.5
Asset Turnover Ratio

Name of Acquiring Bank (Acquired Bank)	**3 Year**			**5 Year**		
	Pre **Mean (SD)**	**Post** **Mean (SD)**	t-value	**Pre** **Mean (SD)**	**Post** **Mean (SD)**	t-value
Bank of Baroda (Barelly Corporation Banks Ltd)	0.1128 (0.0040)	0.1006 (0.0015)	5.02***	0.1118 (0.0033)	0.0987 (0.0029)	6.64***
Bank of Baroda (Banaras State Bank Ltd)	0.1021 (0.0014)	0.0913 (0.0080)	2.31*	0.1057 (0.0054)	0.0846 (0.0108)	3.91***
HDFC Bank Ltd. (Times Bank Ltd)	0.1052 (0.0027)	0.0865 (0.0057)	5.16***	0.0959 (0.0364)	0.0811 (0.0085)	0.88
ICICI Bank Ltd. (Bank of Madura)	0.0950 (0.0099)	0.0794 (0.0471)	0.56	0.1068 (0.0178)	0.0784 (0.0334)	1.68
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	0.1071 (0.0010)	0.1087 (0.0006)	-2.43*	0.1094 (0.0033)	0.1099 (0.0021)	-0.33
Oriental Bank of Commerce (Global Trust Bank Ltd)	0.1126 (0.0023)	0.0791 (0.0029)	15.87***	0.1112 (0.0025)	0.0820 (0.0046)	12.40***
Punjab National Bank (Nedungadi Bank Ltd)	0.1069 (0.0023)	0.0863 (0.0088)	3.92***	0.1111 (0.0083)	0.0844 (0.0068)	5.57***
State Bank Of India (Kashinath Seth Bank)	0.1045 (0.0084)	0.1075 (0.0061)	-0.50	0.1073 (0.0078)	0.1038 (0.0070)	0.76

Source: Computed on the basis of CMIE Data Source

Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

B3. Fixed Asset Turnover Ratio

The fixed-asset turnover ratio measures a banks' ability to generate net income from fixed-asset investments - specifically property net of depreciation. A higher fixed-asset turnover ratio shows that the banks have been more effective in using the investment in fixed assets to generate revenues. The results of t-test comparing Fixed Asset Turnover Ratio (FATR) between pre and post event period of 3 and 5 year are reported in Table 4.6.

From the perusal of the 4.6, it is apparent that the Fixed Asset Turnover Ratio (FATR) has increased significantly from 7.2561 times in pre period to 10.0718 times in post-period of 3 year for acquisition deal of Bank of Baroda with Barelly Corporation Banks ($t = -5.86$, $p < 0.01$). Similarly, the 3-year FATR during post period is significantly higher than that of pre-period for Bank of Baroda's acquisition of Banaras State Bank Ltd (t-value = -3.13, $p < 0.01$) and PNB acquisition of Nedungadi Bank Limited (t-value = -6.11, $p < 0.01$). At the same time, the FATR during 3 year in pre-period tend to decline in 3 year during post-period at notable level against OBC acquiring Global Trust Bank (t-value = 7.14, $p < 0.01$) and State Bank of India acquiring Kashinath Seth Bank (t-value = 4.06, $p < 0.01$). For the acquisition deals of banks other than mentioned above, there is no any remarkable difference in the FATR between pre and post period of 3 years. When FATR for 5 year between pre and post acquisition period is compared, it is apparent from Table 6.12 that the scenario in the case of BOB with Barelly Corporation and HDFC Bank with Times Bank, OBC with Global Trust Bank and State Bank of India with Kashinath Bank is similar to that of 3-year FATR between two periods. However, an increase in 5-year FATR from 8.8531 times during pre-period to 10.6244 during post-period have been insignificant in the PNB's acquisition deal with Nedungadi Bank Limited. That is, when the FATR is compared for longer period, the effect of acquisition become trivial for PNB.

Table 4.6
Fixed Asset Turnover Ratio

Name of Acquiring Bank (Acquired Bank)	**3 Year**			**5 Year**		
	Pre	**Post**		**Pre**	**Post**	
	Mean (SD)	**Mean (SD)**	t-value	**Mean (SD)**	**Mean (SD)**	t-value
Bank of Baroda (Barelly Corporation Banks Ltd)	7.6706 (0.8216)	9.9492 (0.2254)	-4.63***	7.2561 (1.0191)	10.0718 (0.3399)	-5.86***
Bank of Baroda (Banaras State Bank Ltd)	9.5809 (0.4836)	9.8482 (0.7887)	-0.50	8.9618 (0.9879)	9.7088 (0.5927)	-1.45
HDFC Bank Ltd. (Times Bank Ltd)	2.6939 (0.7099)	5.0584 (0.4016)	-5.02***	3.0212 (1.4487)	5.1006 (0.3343)	-3.13***
ICICI Bank Ltd. (Bank of Madura)	3.1899 (1.3692)	2.1675 (1.3385)	0.92	2.9136 (1.0521)	2.8652 (1.4534)	0.06
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	18.2396 (0.4712)	15.8941 (3.4549)	1.17	19.3935 (2.0557)	19.2290 (5.1987)	0.07
Oriental Bank of Commerce (Global Trust Bank Ltd)	25.0735 (1.5935)	12.9208 (2.4814)	7.14***	21.9352 (4.7996)	13.1356 (4.7841)	2.90**
Punjab National Bank (Nedungadi Bank Ltd)	9.2230 (0.4970)	11.0152 (0.1068)	-6.11***	8.8531 (0.6208)	10.6244 (2.1908)	-1.74
State Bank Of India (Kashinath Seth Bank)	21.7673 (2.9810)	12.7646 (2.4187)	4.06***	23.4302 (3.3518)	12.1090 (1.9646)	6.52***

Source: Computed on the basis of CMIE Data Source
Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Test of Hypothesis: 2

Ho: There is no difference operational performance of the merged banks before and after merger (with respect to WCT Ratio, AT Ratio and FA Ratio)

H1: μ1=μ2: There is difference operational performance of the merged banks before and after merger (with respect to WCT Ratio, AT Ratio and FA Ratio)

Conclusion: Reject Null Hypothesis because there is difference operational performance of the merged banks before and after merger (with respect to WCT Ratio, AT Ratio and FA Ratio

C. PROFITABILITY POSITION

The primary objective of any firms is to earn profits. Profit earning capacity is considered to be essential for the survival of the firms. A banking sector needs profits not only for its existence but also for expansion and diversification in other financial areas. Investors want adequate returns on their investments while employees want higher remunerations and the creditors want higher security for their interest and loan. So, the profitability ratios is used to test the efficiency of the management, as the measure of worth of their investment to the creditors, the margin of safety to employees as a source of benefits, to Government a measure of tax paying capacity, etc. Here, the profitability ratios are used to ascertain whether there have been any remarkable change in profit making ability of the banks or not due to their merger and acquisition activities. The status of various profitability ratios in 3 year and 5 year pre and post event period are compared for this purpose.

C2. Gross Profit Margin

Gross profit margin is used to assess the profitability of a firm's core activities, excluding fixed costs. It is a measure of how well each dollar of a company's revenue is available to meet expenses and profits after paying for the goods or services that were rendered. Gross profit margin indicates the relationship between net revenue from income (banks) and the cost of expenses to generate the income. A high gross profit margin indicates that a business can make a reasonable net earnings as long as it keeps overhead cost in control. The results emerged out from the analysis comparing GPM for 3-year and 5-year period during pre and post acquisition are presented in Table 4.7.

An examination of the Table 4.7 indicates that t-values are negative and significant for difference in 3.-year GPM between pre and post acquisition period for OBC with Punjab Co-operative Bank and Bari Doab Bank Ltd (t-value = -5.69, $p < 0.01$) and State Bank of India with Kashinath Seth Bank (t-value = -8.71, $p < 0.01$). In contrast to the above, t-values are positive and significant for difference in 3-year GPM between pre and post acquisition period for HDFC Bank with Times Bank (t-value = 2.97, $p < 0.05$), ICICI Bank with Bank of Madura (t-value = 2.11, $p < 0.10$) and PNB with Nedungadi Bank Limited (t-value = 6.53, $p < 0.01$). That is, there have been significant increase for OBC and SBI, significant decline for HDFC, ICICI and PNB in GPM during shorter-time period of 3 year before and after the event of acquisition deals of the respective banks. The acquisition deals of BOB with both Barelly Corporation Bank and Banaras State Bank and OBC with Global Trust Bank does not tend to change the GPM at notable level. The short-term effect on GPM is negative (decline in GPM) for HDFC, ICICI and PNB whereas it is positive for OBC (Punjab Co-operative Bank and Bari Doab Bank Ltd) and SBI due to their acquisition of other banks.

From the observation of the Table 4.7, t-test results comparing the GPM between pre and post event period of 5-year (longer time period), it is evident that the GPM during 5 year in pre-period has declined significantly against acquisition deal of BOB with Banaras State Bank (GPM = 0.7001 in pre and 0.6436 in post period – t value = 1.89, $p < 0.10$) and ICICI Bank with Bank of Madura (GPM = 0.7899 in pre and 0.7386 in post period – t value = 2.65, $p < 0.05$) whereas it has increased for OBC and SBI due to their acquisition deals with Punjab Co-operative Bank and Bari Doab Bank Ltd (GPM = 0.6819 in pre and 0.7693 in post period – t value = -4.48, $p < 0.01$) and Kashinath Seth Bank (GPM = 0.5967 in pre and 0.6933 in post period – t value = -9.65, $p < 0.10$) respectively. It is apparent from the above results that the difference in GPM between pre and post period, which is insignificant for BOB's deal with Banaras State Bank in shorter time period of 3 year, has become significant for longer time period of 5 year. The above scenario have been reverse for ICICI and PNB banks.

Table 4.7
Gross Profit Margin

Name of Acquiring Bank (Acquired Bank)	3 Year			5 Year		
	Pre	Post	t-value	Pre	Post	t-value
	Mean (SD)	**Mean (SD)**		**Mean (SD)**	**Mean (SD)**	
Bank of Baroda (Barelly Corporation Banks Ltd)	0.6731 (0.0529)	0.7031 (0.0277)	-0.87	0.6432 (0.0555)	0.6923 (0.0344)	-1.68
Bank of Baroda (Banaras State Bank Ltd)	0.7008 (0.0276)	0.6397 (0.0717)	1.38	0.7001 (0.0276)	0.6436 (0.0611)	1.89*
HDFC Bank Ltd. (Times Bank Ltd)	0.7992 (0.0147)	0.7734 (0.0033)	2.97**	0.6452 (0.3216)	0.7428 (0.0425)	-0.67
ICICI Bank Ltd. (Bank of Madura)	0.8028 (0.0289)	0.7386 (0.0439)	2.11*	0.7899 (0.0294)	0.7386 (0.0318)	2.65**
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	0.6879 (0.0265)	0.7819 (0.0109)	-5.69***	0.6819 (0.0392)	0.7693 (0.0191)	-4.48***
Oriental Bank of Commerce (Global Trust Bank Ltd)	0.7461 (0.0086)	0.7485 (0.0216)	-0.18	0.7625 (0.0237)	0.7756 (0.0402)	-0.63
Punjab National Bank (Nedungadi Bank Ltd)	0.6784 (0.0133)	0.6246 (0.0053)	6.53***	0.6806 (0.0162)	0.6519 (0.0545)	1.13
State Bank Of India (Kashinath Seth Bank)	0.6059 (0.0143)	0.6878 (0.0078)	-8.71***	0.5967 (0.0177)	0.6933 (0.0137)	-9.65***

Source: Computed on the basis of CMIE Data Source
Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

C3. Operating Profit Margin

The Operating Profit Margin (OPM) is a measurement of what proportion of a company's revenue is left over, before taxes and other indirect costs (such as rent, bonus, interest, etc.), after paying for variable costs of production as wages, raw materials (interest on deposits in the case of banks), etc. It is derived by dividing operating profit by net sales (income in the case of financial institution like bank). Operating profit margin indicates how profitable the company's (bank's) operations are. If the margin decreases, then the company's (bank's) profitability is declining. The results obtained from comparing 3 year and 5 year OPM between pre and post event period are depicted in Table 4.8.

According to Table 4.8, the difference in average OPM in 3 year between pre and post event period is significant for all banks except BOB for its both acquisition deals.

The OPM for 3 years during pre-period, 0.7653 times, 0.7688 times, 0.7344 times and 0.6686 times has significantly declined to 0.7286 times, 0.7014 times, 0.6798 times and 0.6072 times in 3 year during post-period against acquisition activities of HDFC (t-value = 3.03, $p < 0.05$), ICICI (t-value = 2.33, $p < 0.10$) OBC (with Global Trust) (t-value = 5.54, $p < 0.10$) and PNB (t-value = 6.46, $p < 0.01$) respectively. Alternatively, the 3-year OPM tends to increase significantly from 0.6796 times and 0.6006 times in pre-period to 0.7688 times and 0.6740 times in post-period against acquisition deal of OBC with Punjab Co-operative Bank and Bari Doab Bank Ltd (t-value = -.5.71, $p < 0.01$) and SBI with Kashinath Seth Bank (t-value = -5.24, $p < 0.01$) respectively.

As per Table 4.8, there have been significant decline in 5-year OPM from 0.6903 times in pre-period to 0.6280 times in post-period (t-value = 2.04, $p < 0.10$), 0.7558 times to 0.6924 times (t-value = 3.09, $p < 0.01$) against acquisition deal of BOB with Banaras State Bank and ICICI Bank with Bank of Madura. In contrast to the above, there have been significant increase in 5-year OPM from its level of 0.6737 times and 0.5913 times in pre-period to 0.7566 times and 0.6796 times in post-period for OBC (t-value = -4.36, $p < 0.01$) and SBI (t-value = -7.71, $p < 0.01$) relative to their acquisition deal with Punjab Co-operative Bank / Bari Doab Bank Ltd and Kashinath Seth Bank respectively.

The difference between pre and post period OPM in shorter time interval, which is significant for HDFC, OBC (Global Trust Bank) and PNB, is found to be insignificant for longer time interval of 5 year. That is, when considered for longer time duration, the acquisition deals of majority of the banks do not tend to make any changes in their profitability when measured in terms of operating profit margin.

Table 4.8
Operating Profit Margin

Name of Acquiring Bank (Acquired Bank)	**3 Year**			**5 Year**		
	Pre	**Post**		**Pre**	**Post**	
	Mean (SD)	**Mean (SD)**	t-value	**Mean (SD)**	**Mean (SD)**	t-value
Bank of Baroda (Barelly Corporation Banks Ltd)	0.6638 (0.0505)	0.6918 (0.0291)	-0.83	0.6343 (0.0539)	0.6813 (0.0342)	-1.64
Bank of Baroda (Banaras State Bank Ltd)	0.6913 (0.0291)	0.6286 (0.0717)	1.40	0.6903 (0.0276)	0.6280 (0.0624)	2.04*
HDFC Bank Ltd. (Times Bank Ltd)	0.7653 (0.0140)	0.7286 (0.0156)	3.03**	0.6101 (0.3150)	0.6842 (0.0631)	-0.52
ICICI Bank Ltd. (Bank of Madura)	0.7688 (0.0358)	0.7014 (0.0351)	2.33*	0.7558 (0.0325)	0.6924 (0.0323)	3.09***
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	0.6796 (0.0257)	0.7688 (0.0085)	-5.71***	0.6737 (0.0384)	0.7566 (0.0182)	-4.36***
Oriental Bank of Commerce (Global Trust Bank Ltd)	0.7344 (0.0086)	0.6798 (0.0362)	2.54*	0.7498 (0.0222)	0.7245 (0.0673)	0.80
Punjab National Bank (Nedungadi Bank Ltd)	0.6686 (0.0155)	0.6072 (0.0056)	6.46***	0.6717 (0.0177)	0.6364 (0.0574)	1.32
State Bank Of India (Kashinath Seth Bank)	0.6006 (0.0143)	0.6740 (0.0196)	-5.24***	0.5913 (0.0176)	0.6796 (0.0186)	-7.71***

Source: Computed on the basis of CMIE Data Source

Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

C4. Net Profit Margin

The Net Profit Margin (NPM) or simply called Profit Margin is mostly used for internal comparison. It is difficult to accurately compare the net profit ratio for different entities. Individual businesses' operating and financing arrangements vary so much that different entities are bound to have different levels of expenditure, so that comparison of one with another can have little meaning. A low profit margin indicates a low margin of safety: higher risk that a decline in sales (income in the case of non-manufacturing companies) will erase profits and result in a net loss. Profit margin is an indicator of a company's various policies & its ability to control costs. Differences in competitive strategy and product mix cause the profit margin to vary among different companies. NPM also tells everyone how much profit a company makes for every rupee it generates in revenue (income or sales). The difference in NPM for shorter (3-year) & longer (5-year) time intervals between pre and post acquisition period is analyzed using t-test & the results of the analysis are shown in Table 4.9.

It can be observed from Table 4.9 that the acquisition activity of BOB with Banaras State Bank, PNB with Nedungadi Bank and SBI with Kashinath Seth Bank tends to increase the net earnings of these banks. The NPM of BOB, PNB and SBI on the average for 3 year, which stood at 0.0637 times (6.37%), 0.0703 times (7.03%) and 0.0336 times (3.36%) in pre-period, has gone up to 0.1038 times (10.38%), 0.1237 times (12.37%) and 0.0724 times (7.24%) in post-period respectively. The above positive changes are also significant statistically (t-value = -2.58, $p < 0.10$ for BOB, t-Value = -8.81, $p < 0.01$ for PNB and t-value = -2.11, $p < 0.10$ for SBI). Only for HDFC there have been significant decline in NPM due to its deal acquiring Times Bank Ltd (Mean = 0.2012 in pre declined to 0.1491 in post period and t-value = 6.06, $p < 0.01$). For other banks, NPM, on an average for 3 year, remains same and is not affected by the acquisition activities.

Table 4.9
Net Profit Margin

Name of Acquiring Bank (Acquired Bank)	3 Year			5 Year		
	Pre Mean (SD)	Post Mean (SD)	t-value	Pre Mean (SD)	Post Mean (SD)	t-value
Bank of Baroda (Barelly Corporation Banks Ltd)	0.0663 (0.0229)	0.0685 (0.0228)	-0.12	0.0545 (0.0253)	0.0859 (0.0293)	-1.82
Bank of Baroda (Banaras State Bank Ltd)	0.0637 (0.0214)	0.1038 (0.0164)	-2.58*	0.0676 (0.0211)	0.1010 (0.0122)	-3.07**
HDFC Bank Ltd. (Times Bank Ltd)	0.2012 (0.0136)	0.1491 (0.0062)	6.06***	0.1535 (0.0846)	0.1578 (0.0128)	-0.11
ICICI Bank Ltd. (Bank of Madura)	0.1145 (0.0260)	0.1085 (0.0236)	0.30	0.1275 (0.0330)	0.1223 (0.0266)	0.28
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	0.1109 (0.0544)	0.1160 (0.0141)	-0.16	0.0866 (0.0516)	0.1009 (0.0245)	-0.56
Oriental Bank of Commerce (Global Trust Bank Ltd)	0.0913 (0.0257)	0.1305 (0.0417)	-1.39	0.0981 (0.0206)	0.1058 (0.0476)	-0.33
Punjab National Bank (Nedungadi Bank Ltd)	0.0703 (0.0022)	0.1237 (0.0103)	-8.81***	0.0771 (0.0131)	0.1228 (0.0080)	-6.64***
State Bank Of India (Kashinath Seth Bank)	0.0336 (0.0201)	0.0724 (0.0247)	-2.11*	0.0260 (0.0177)	0.0697 (0.0199)	-3.68***

Source: Computed on the basis of CMIE Data Source

Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

An observation of the Table 4.9 reveals that the difference in NPM between pre and post event period for HDFC bank, which is significant for shorter time period of 3 year, becomes insignificant when compared for longer time period of 5 year. Further, the level of significance for the difference in 5-year NPM has increased in the case of BOB (Banaras) and SBI and decreased for PNB. On an average, the NPM for 5 year 6.76 per cent, 7.71 per cent and 2.60 per cent in pre-event period has significantly increased to 10.10 per cent, 12.28 per cent and 6.97 per cent for BOB (Banaras) (t-value = -3.07, $p < 0.05$), PNB (t-value = -6.64, $p < 0.01$) and SBI (t-value = -3.68, $p < 0.01$) respectively.

For other banks, except BOB with Barelly Corporation, the difference in 5 year NPM between event periods is almost zero. In respect of BOB acquiring Barelly Corporation, NPM, on an average for 5 year, 5.45 per cent in pre period has increased to 8.59 per cent in post-period. The t-value of -1.82, though insignificant, is not trivial. So, it can be concluded that for longer time period also, the acquisition activity of BOB, PNB and SBI has impact on their left-over earnings.

C4. Return on Net Worth

Return on Net Worth (RONW) is used in finance sector as a measure of a firms profitability. It reveals how much profit a financing firm generates with the money that the equity shareholders have invested. This ratio can also be called as Return on Equity (ROE). RONW is a measure for judging the returns that shareholder gets on his investment. The Tables 6.19 and 6.20 presents the 3 year and 5 year mean RONW in pre and post period of banks' acquisition event.

It can be observed from Table 4.10 that the 3 year mean RONW, 18.64 per cent and 13.0933 per cent in pre event period has increased to 13.0667 per cent, 16.8433 per cent,

Table 4.10
Return on Net Worth

Name of Acquiring Bank (Acquired Bank)	**3 Year**			**5 Year**		
	Pre	**Post**	t-value	**Pre**	**Post**	t-value
	Mean (SD)	**Mean (SD)**		**Mean (SD)**	**Mean (SD)**	
Bank of Baroda (Barelly Corporation Banks Ltd)	12.0200 (3.1190)	13.0667 (4.2045)	-0.35	10.9720 (3.2058)	15.4300 (4.3960)	-1.83*
Bank of Baroda (Banaras State Bank Ltd)	12.3433 (4.0252)	16.8433 (3.6958)	-1.43	12.1080 (3.6005)	14.0320 (4.9466)	-0.70
HDFC Bank Ltd. (Times Bank Ltd)	22.5733 (4.6417)	21.2833 (3.3263)	0.39	17.2800 (11.2446)	20.5340 (2.6814)	-0.64
ICICI Bank Ltd. (Bank of Madura)	19.6467 (4.4950)	8.9300 (10.4669)	1.63	19.0380 (5.1483)	11.6720 (8.3883)	1.67
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	20.6500 (4.3386)	20.5233 (0.5670)	0.05	35.3240 (36.3772)	19.0800 (3.0921)	0.99
Oriental Bank of Commerce (Global Trust Bank Ltd)	19.4467 (5.4970)	13.9367 (9.2553)	0.89	19.8340 (3.9412)	12.5340 (7.2201)	1.98*
Punjab National Bank (Nedungadi Bank Ltd)	18.6400 (0.0954)	19.4867 (6.2053)	-0.24	16.0120 (4.7529)	18.4000 (4.7142)	-0.80
State Bank Of India (Kashinath Seth Bank)	13.0933 (3.3505)	13.8933 (5.3749)	-0.22	12.2440 (2.9119)	14.4800 (4.3697)	-0.95

Source: Computed on the basis of CMIE Data Source

Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

19.4867 per cent and 13.8933 per cent in post event period due to acquisition activities of BOB with Banaras State Bank, PNB with Nedungadi Bank, and SBI with Kashinath Seth Bank respectively. On the other hand, the 3 year men RONW has declined from pre event period to post event period in the case of takeover deal of ICICI (19.6467 to 8.9300) and OBC (19.4467 to 13.9367) banks with Bank of Madura and Global Trust Bank respectively.

However, the above decline in 3 year RONW from pre to post event period is not at mentionable level for both ICICI (t value = 1.63, not significant) and OBC (t value = 0.89, not significant).

The 3 year mean RONW seems to be remains same between two periods in respect of BOB with Barelly Corporation, HDFC with Times Bank, OBC with Punjab Co-op Bank / Bari Doab Bank Ltd, PNB with Nedungadi Bank and SBI with Kashinath Seth Bank as obtained t-values for the difference in 3 year mean RONW between pre and post even periods are very trivial. On the whole, it is concluded that there is neither decline nor increase in the return on net worth due to takeover deals of public and private sector banks.

According to Table 4.10, in which the results of comparison of 5 year mean RONW between pre and post event periods are depicted, there have been significant marginal increase in the 5 year mean RONW from pre event (10.9720%) to post event (15.43%) periods (t value = -1.83, $p < 0.10$) due to BOB's takeover of Barelly Corporation Banks. On the other hand, there have been a significant marginal decrease in 5 year RONW between pre (19.834%) and post (12.534%) event periods against OBC's acquisition of Global Trust Bank ($t = 1.97$, $p < 0.10$).

The decline in 5 year RONW can also be seen from pre to post event period for ICICI Bank's takeover of Bank of Madura, but the decline is not significant (t value = 1.67, $p > 0.10$, insignificant). Regarding 5 year RONW in pre and post event periods for other remaining banks' takeover activities (BOB with Banaras SB, HDFC, OBC with Pun Co-op/Bari, PNB, SBI), the change in it is almost zero (t values are trivial).

C5. Return on Capital Employed (ROCE)

Return on Capital Employed is used to indicate the efficiency and profitability of a company's capital investments. The Return on Capital Employed ratio (ROCE) tells us how much profit we earn from the investments the shareholders have made in their company. The ROCE is used in finance as a measure of the returns that a company is realizing from its capital employed. More commonly it is used for assessing whether a business generates enough returns to pay for its cost of capital or not. The status of ROCE for 3 year and 5 year before and after acquisition activities of the public and private sector banks are shown in Table 4.11.

It is apparent from Table 4.11 that there have been huge declines in 3 year ROCE of ICICI after taking over Bank of Madura. The 3 year ROCE of ICICI, which stood at 12.4933 per cent in pre event period has declined to 1.3833 per cent in post event period, and the declined it is highly significant (t value = 5.07, $p < 0.01$). On the other hand, ROCE of 12.13 per cent, on an average for 3 year in pre event period, has significantly increased to 18.02 per cent for OBC due to its' takeover of Punjab Co-op Bank / Bari Doab Bank (t value = -3.13, $p < 0.05$). There seems to be an increase in 3 year ROCE from pre to post event period for SBI's acquisition activity. But the above positive change is not at mentionable level (t value = -2.06, $p > 0.10$).

In respect of other banks' acquisition activities, the difference in 3 year ROCE between pre and post acquisition periods is trivial as t-values for the difference in mean values between periods are very small. From the comparison of 5 year ROCE in pre and post event period, the results of which are portrayed in Table 4.11, it becomes evident that the acquisition activities of BOB with Barelly Corporation Banks and SBI with Kashinath Seth Bank has increased the ROCE by 3.9640 per cent (11.5940 in post – 7.6300 in pre period) and 4.4660 per cent (6.9060 – 2.4400) respectively. The above positive change in 5 year ROCE is significant at 5 per cent level for BOB (t value = -2.25, $p < 0.05$) and 1 per cent level for SBI (t value = -3.98, $p < 0.01$).

Table 4.11
Return on Capital Employed

Name of Acquiring Bank (Acquired Bank)	**3 Year**			**5 Year**		
	Pre	**Post**	t-value	**Pre**	**Post**	t-value
	Mean (SD)	**Mean (SD)**		**Mean (SD)**	**Mean (SD)**	
Bank of Baroda (Barelly Corporation Banks Ltd)	7.9633 (1.6857)	9.9900 (3.5894)	-0.89	7.6300 (1.9742)	11.5940 (3.3589)	-2.28**
Bank of Baroda (Banaras State Bank Ltd)	9.7000 (3.5455)	12.1867 (3.1459)	-0.91	8.9940 (2.9393)	9.6360 (4.2799)	-0.28
HDFC Bank Ltd. (Times Bank Ltd)	12.9267 (1.4633)	12.1033 (0.3436)	0.95	12.1250 (1.9995)	12.6240 (0.9441)	-0.50
ICICI Bank Ltd. (Bank of Madura)	12.4933 (3.3606)	1.3833 (1.7568)	5.07***	12.7740 (3.9310)	2.4180 (1.8896)	5.31***
Oriental Bank of Commerce (Punjab Co-op Bank and Bari Doab Bank Ltd)	12.1300 (3.1195)	18.0200 (0.9364)	-3.13**	28.9220 (39.8310)	16.1600 (3.0862)	0.71
Oriental Bank of Commerce (Global Trust Bank Ltd)	14.3233 (2.8151)	10.8233 (6.2583)	0.88	15.6420 (2.7242)	9.5100 (5.0885)	2.38**
Punjab National Bank (Nedungadi Bank Ltd)	13.8967 (1.0250)	12.7100 (4.8787)	0.41	12.2380 (3.3858)	11.6180 (3.7981)	0.27
State Bank Of India (Kashinath Seth Bank)	3.2433 (2.1600)	6.2367 (1.2907)	-2.06	2.4400 (1.8937)	6.9060 (1.6505)	-3.98***

Source: Computed on the basis of CMIE Data Source

Figures in parentheses are standard deviation ***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

On the other hand, the change in 5 year ROCE between pre and post event period is negative and significant at 1 per cent level and 5 per cent level in respect of acquisition activities of ICICI bank with Bank of Madura (t value = 5.31, $p < 0.01$) and OBC Bank with Global Trust Bank (t value = 2.38, $p < 0.05$). At the same time, the acquisition activities of BOB with Banaras State Bank, HDFC with Times Bank, OBC with Punjab Co-operative Bank / Bari Doab Bank and PNB with Nedungadi Bank do not have any impact on ROCE.

Test of Hypothesis: 3

H_o: There is no difference in profitability position of the merged banks before and after merger (with respect to GPM, OP ratio, RON, NP ratio and ROCE)

H1: There is difference in profitability position of the merged banks before and after merger (with respect to GPM, OP ratio, RON, NP ratio and ROCE)

Conclusion: Reject Null Hypothesis because there is difference in profitability position of the merged banks before and after merger (with respect to GPM, OP ratio, RON, NP ratio and ROCE)

D. Overall Financial Position

E. Financial Position of Public Sector Banks

In the following section of this chapter, the financial performance before and after acquisition activities of all public sector banks for period of 3 year and 5 year is compared based on liquidity, activity and profitability ratios. The results of comparative analysis for public sector banks are reported in Table 4.12.

An observation of the Table 4.12 shows that the liquidity position of the public sector banks in terms of CR, QR and Cash Ratio tend to experience with trivial increase against their deals associated with acquisition of other banks. The similar scenario can be visible in the case of their activities in respect of turning working capital into earnings.

Table 4.12
Financial Ratios of Public Sector Banks during Pre and Post Acquisition Period

Financial Ratios	**3 Year**			**5 Year**		
	Pre Mean (SD)	**Post Mean (SD)**	t-value	**Pre Mean (SD)**	**Post Mean (SD)**	t-value
Liquidity Position	3.8583	4.1639		4.3960	3.9043	
Current Ratio (CR)	(1.6687)	(2.6672)	-0.41	(2.3312)	(2.2603)	0.83
Quick Ratio (QR)	3.6017	3.9356		4.1393	3.6813	
	(1.5664)	(2.5193)	-0.48	(2.2302)	(2.1259)	0.81
Cash Ratio (CSHRAT)	2.9095	3.0350		3.1854	2.9218	
	(1.4897)	(1.8251)	-0.23	(1.7845)	(1.5798)	0.61
Operational Performance	1.2678	1.3007		1.3660	1.2113	
Working Capital Turnover Ratio (WCTO)	(0.5822)	(0.4862)	-0.18	(0.5300)	(0.4257)	1.25
Asset Turnover Ratio (ASTTO)	0.1077	0.0956		0.1094	0.0939	
	(0.0053)	(0.0122)	3.85***	(0.0056)	(0.0124)	6.26***
Fixed Asset Turnover Ratio (FATO)	15.2592	12.0653		14.9717	12.4798	
	(7.0589)	(2.7481)	1.79*	(7.2563)	(4.3603)	1.61
Profitability Position	0.6820	0.6976		0.6775	0.7043	
Gross Profit Margin (GPM)	(0.0488)	(0.0636)	-0.82	(0.0597)	(0.0644)	-1.67*
Operating Profit Margin (OPM)	0.6730	0.6750		0.6685	0.6844	-1.02
	(0.0470)	(0.0609)	-0.11	(0.0576)	(0.0632)	
Net Profit Margin (NPM)	0.0727	0.1025		0.0683	0.0977	
	(0.0347)	(0.0319)	-2.68***	(0.0347)	(0.0297)	-3.52***
Return on Net Worth (RONW)	16.0322	16.2917		14.7500	15.6593	
	(4.8917)	(5.5295)	-0.15	(4.9800)	(5.0942)	-0.70
Return on Capital Employed (ROCE)	10.2094	11.6611		9.5300	10.9040	
	(4.4832)	(4.8554)	-0.93	(4.8600)	(4.4311)	-1.15

Source: Computed on the basis of CMIE Data Source
Figures in parentheses are standard deviation ***Significant at 1% level; *Significant at 10% level

Regarding their activities, in turning their total assets and fixed assets into generating income, the table envisages the notable decline after acquisition activities. That is, the ATR on an average for 3 year, 0.1077 times in pre-period has declined to 0.0956 times in post-period and the difference in these two values is significant at 1 per cent level (t-value = 3.85, $p < 0.01$). Similarly, the FATR on an average for 3 year has significantly declined to 12.0653 times in post-period from 15.2892 times in pre-period (t-value = 1.79, $p < 0.10$).

However, the scenario is not same in the case of Net profit margin. Though profitability over 3 year, in terms of GPM, OPM, RONW and ROCE remains before and after acquisition event, the net earnings on the average for 3 year, which stood at 7.27 per cent in pre-period has increased significantly to 10.25 per cent in post-period (t-value = -2.68, $p < 0.01$). Therefore, it is found that there is notable change in liquidity position of the public sector banks due to their acquisition activities whereas there have been significant decline in their activities of turning their assets for generating income. It is however found that the net earnings of public sector banks in shorter-time periods of have increased significantly after acquiring other banks.

According to Table 4.12, the status of liquidity in long-time period of 5 year is as same as that of 3-year time period before and after acquisition deals of public sector banks. However, activities with regard to utilization of fixed assets for income generation (difference between pre and post period is significant) and profitability in term of GPM (difference between pre and post period is insignificant) vary for longer period. That is, the difference in fixed assets turnover ratio, which is significant for 3 year pre and post periods, becomes insignificant for 5 year period in pre and post acquisition and the above scenario is vice versa in the case of GPM.

Only the behaviour of asset turnover ratio (t-value = 6.26, $p < 0.01$) and NPM (t-value = -3.52, $p < 0.01$) remains same for both shorter and longer time intervals. That is, for longer period also, there have been significant impact of acquisition deal of public sector banks on their FATO and NPM. On the whole, it is concluded that the performance of public sector banks in terms of generating income relative to their investment in fixed assets is significantly and negatively affected whereas their performance in respect of their net earnings is positively influenced by acquisition deals.

Test of Hypotheses:

H_0: There is no difference in profitability position of the merged banks before and after merger (with respect to GPM, OP ratio, RON, NP ratio and ROCE)

H_1: There is difference in profitability position of the merged banks before and after merger (with respect to GPM, OP ratio, RON, NP ratio and ROCE)

Conclusion: Reject Null Hypothesis because there is difference in profitability position of the merged banks before and after merger (with respect to GPM, OP ratio, RON, NP ratio and ROCE

F. Financial Position of Private Banks

The financial performance of private sector banks before and after their acquisition activities are evaluated by comparing various ratios pertaining to liquidity, activity and profitability between pre and post period of 3 year and 5 year and the results of the analysis are presented in Table 4.13.

As shown in Table 4.13 the acquisition deals of private sector banks tend to reduce to the liquidity position of private sector banks. This becomes apparent that CR, QR and CASH ratio, which stood at 4.5383 times, 4.4750 times and 3.7901 times on an average for 3 year in pre period has declined to 1.5067 times, 1.3883 times and 1.0824 times during 3 year in post-period. Further, the difference in CR (t-value = 3.88, $p < 0.01$), QR (t-value = 3.87, $p < 0.01$) and Cash Ratio (t-value = 3.49, $p < 0.01$) between two periods is significant. It is also evident from table that the WCTO has also declined significantly but at marginal level from 1.9561 times in pre-period to 0.8724 times in post-period (t-value = 2.09, $p < 0.10$).

Regarding generating income relative to total assets and fixed assets, there is no any difference between two event periods is found. It is further shown in the table that there have been notable decline in GPM (t-value = 2.79, $p < 0.05$) and OPM (t-value = 3.40, $p < 0.01$) as well as in ROCE (t-value = 2.28, on an average for 3 year, from pre-period to post period

Table 4.13
Financial Ratios of Private Sector Banks during Pre and Post Acquisition Period

Financial Ratios	**3 Year**			**5 Year**		
	Pre	**Post**	t-value	**Pre**	**Post**	t-value
	Mean (SD)	**Mean (SD)**		**Mean (SD)**	**Mean (SD)**	
Liquidity Position						
Current Ratio (CR)	4.5383	1.5067	3.88***	4.3160	1.3530	4.29***
	(1.8897)	(0.3061)		(2.1354)	(0.4494)	
Quick Ratio (QR)	4.4750	1.3883	3.87***	4.2780	1.2150	4.43***
	(1.9290)	(0.3036)		(2.1507)	(0.3993)	
Cash Ratio (CSHRAT)	3.7901	1.0824	3.49***	3.2917	0.9396	4.12***
	(1.8646)	(0.3585)		(1.7675)	(0.3595)	
Operational Performance						
Working Capital Turnover Ratio (WCTO)	1.9561	0.8724	2.09*	1.6942	0.4635	2.90**
	(0.7897)	(0.9930)		(0.8434)	(1.0430)	
Asset Turnover Ratio (ASTTO)	0.1001	0.0830	1.33	0.1013	0.0798	1.90*
	(0.0086)	(0.0303)		(0.0276)	(0.0230)	
Fixed Asset Turnover Ratio (FATO)	2.9419	3.6130	-0.79	2.9674	3.9829	-1.65
	(1.0126)	(1.8134)		(1.1950)	(1.5416)	
Profitability Position						
Gross Profit Margin (GPM)	0.8010	0.7560	2.79**	0.7175	0.7407	-0.32
	(0.0206)	(0.0337)		(0.2284)	(0.0355)	
Operating Profit Margin (OPM)	0.7670	0.7150	3.40***	0.6830	0.6883	-0.07
	(0.0244)	(0.0285)		(0.2247)	(0.0474)	
Net Profit Margin (NPM)	0.1578	0.1288	1.23	0.1405	0.1400	0.02
	(0.0510)	(0.0271)		(0.0621)	(0.0271)	
Return on Net Worth (RONW)	21.1100	15.1067	1.38	16.5210	16.1030	0.11
	(4.3897)	(9.6969)		(9.2095)	(7.5022)	
Return on Capital Employed (ROCE)	12.7100	6.7433	2.28**	11.5540	7.5210	1.84*
	(2.3303)	(5.9797)		(4.1210)	(5.5603)	

Source: Computed on the basis of CMIE Data Source
Figures in parentheses are standard deviation ***Significant at 1% level; *Significant at 10% level

At the same time, there is no any remarkable decline in Net profit margin (NPM) and Return on net worth (RONW) as t-values for the difference in 1-year average between pre and post event period are insignificant. From the entire above inferences, it may be concluded that the financial performance of private sector banks during shorter time period of 3 year become poor after their acquisition deals. According to Table 4.13, the performance of private banks for longer time period after acquiring other banks is not attractive. The liquidity position become weak even for 5 year from their acquisition deals and significantly less compared to their liquidity position during 5 year before the acquisition. The scenario in terms of WCTR for 5 year period is also similar to that of 3 year period (shorter time intervals).

Moreover, ATR on an average for 5 year has become significantly less after acquisition activities of private sector banks (t-value = 1.90, $p < 0.10$ for the difference in means). Regarding profitability, there is no any remarkable change in GPM, OPM and NPM when considered for 5-year time intervals (t-values are insignificant). However, the profitability, on an average for 5 year, relative to Capital employed has declined at marginal level from 11.5540 times in pre-period to 7.5210 times in post period (t-value = 1.84, $p < 0.10$).

Hence, from the results comparing the liquidity, activity and profitability ratios, on an average for 3-year (shorter time period) and 5-year (longer time period) between pre and post-acquisition period, it is found that the deals pertaining to acquiring other banks by private sector banks have significant negative effect on their liquidity position as well as on their overall financial performance.

G. Financial Position of both Public and Private Sector Banks

The financial performance for 3 year and 5 year before and after acquisition activities is compared by means of various ratios pertaining to liquidity, activity and profitability for all public and private sectors banks involved in acquiring other banks. The results of the analysis are depicted in Table 4.14. It becomes evident from Table 4.14 that the liquidity position (CR, QR and CASH ratio) and profitability levels (GPM, OPM, NPM, RONW and ROCE) are found to be less during post-event period of 3 year compared to that of pre-period

Table 4.14
Financial Ratios of All the Banks during Pre and Post Acquisition Period

Financial Ratios	**3 Year**			**5 Year**		
	Pre Mean (SD)	**Post Mean (SD)**	t-value	**Pre Mean (SD)**	**Post Mean (SD)**	t-value
Liquidity Position Current Ratio (CR)	4.0283 (1.7102)	3.4996 (2.5807)	0.84	4.3760 (2.2571)	3.2665 (2.2577)	2.20**
Quick Ratio (QR)	3.8200 (1.6648)	3.2988 (2.4455)	0.86	4.1740 (2.1839)	3.0648 (2.1371)	2.30**
Cash Ratio (CSHRAT)	3.1296 (1.5962)	2.5469 (1.7989)	1.19	3.2120 (1.7582)	2.4263 (1.6252)	2.08**
Operational Performance Working Capital Turnover Ratio (WCTO)	1.4399 (0.6920)	1.1937 (0.6519)	1.27	1.4480 (0.6275)	1.0244 (0.7024)	2.84**
Asset Turnover Ratio (ASTTO)	0.1058 (0.0069)	0.0924 (0.0185)	3.31***	0.1074 (0.0146)	0.0904 (0.0166)	4.88***
Fixed Asset Turnover Ratio (FATO)	12.1798 (8.1692)	9.9523 (4.5028)	1.17	11.9706 (8.1972)	10.3556 (5.3450)	1.04
Profitability Position Gross Profit Margin (GPM)	0.7118 (0.0680)	0.7122 (0.0625)	-0.02	0.6875 (0.1225)	0.7134 (0.0602)	-1.20
Operating Profit Margin (OPM)	0.6965 (0.0591)	0.6850 (0.0569)	0.69	0.6721 (0.1190)	0.6854 (0.0591)	-0.63
Net Profit Margin (NPM)	0.0940 (0.0536)	0.1091 (0.0324)	-1.18	0.0864 (0.0528)	0.1083 (0.0342)	-2.20**
Return on Net Worth (RONW)	17.3017 (5.1885)	15.9954 (6.5814)	0.76	15.1900 (6.2100)	15.7703 (5.6853)	-0.43
Return on Capital Employed (ROCE)	10.8346 (4.1545)	10.4317 (5.4709)	0.29	10.0300 (4.7200)	10.0583 (4.8924)	-0.02

Source: Computed on the basis of CMIE Data Source

Figures in parentheses are standard deviation***Significant at 1% level; *Significant at 10% leve

However, from the t-values, which are insignificant, it is apparent that the above differences are not at mentionable level, in turn eliciting the fact that public and private sector banks' activities in respect of acquiring other private limited banks does not tend make any notable changes in their liquidity position and profitability levels when considered altogether. The decline in ATR, on an average for 3 year, from 0.1058 times in pre-period to 0.0924 times in post-period (t-value = 3.31, $p < 0.01$) is significant, which in turn reveals that the efficiency of the banks in generating income relative to their investment in fixed assets has declined during 3 year in post-acquisition period compared to its level in 3 year during pre-period for private limited banks.

It can be seen from Table 4.14 that the average CR, QR and Cash ratio in three year during pre-period, which stood at 4.3760 times, 4.1740 times and 3.2120 times has declined to 3.2665 times, 3.0648 times and 2.4263 times in five year during post-period respectively. The difference in average CR in 5 year between pre and post period is significant for CR (t-value = 2.20, $p < 0.05$), QR (t-value = 2.30, $p < 0.05$) and Cash Ratio (t-value = 2.08, $p < 0.05$). This shows that there have been significant decline in liquidity position of both public and private sector banks together due to their activities pertaining to acquiring private limited banks. Similarly, the efficiency of both public and private sector banks together (all sector banks) have declined at remarkable level after their acquisition deals.That is, the WCTO and ATR, which stood at 1.4480 times and 0.1074 times on an average for 5 year during pre-period has declined to 1.0244 times and 0.0904 times during post-periods and the change in these two ratios between pre and post periods is seen to be significant at 5 per cent (t-value = 2.84, $p < 0.05$ for WCTO) and 1 per cent (t-value = 4.88, $p < 0.05$ for ATR) levels respectively. The above scenario has indicated that the efficiency of the banks involved in acquisition activities has declined after takeover deals.

Regarding profitability, it can be further seen from table that there is no any remarkable change (either increase / decrease) in GPM, OPM, RONW and ROCE against takeover deals of both public and private sector banks over 5 year in pre and post event periods. However, the net earnings after all expenses in 5 year, i.e., net profit on an average for 5 year have increased from 8.64 per cent in pre-period to 10.83 per cent in post-period against acquisition deals of all sector banks. i.e net earnings tend to increase against taking over of private limited banks by public and private sector banks in India.

4.2 CAMELS RATING ASSESSMENT OF SELECTED MERGED BANKS IN INDIA

In 1979, the Uniform Financial Institutions Rating System was adopted as a standardized framework for the examination process to develop a rating system whereby the most critical components of a financial institution's overall safety and soundness could be identified, measured, and quantified. Today, CAMELS rating has become a concise and indispensable tool for examiners and regulators. CAMEL is the acronym for the main approach to banks' financial analysis, referring to the five key elements of banks assessment: Capital adequacy, Asset quality, Management competency, Earnings, and Liquidity. *In 1997, a sixth component was added – **S**ensitivity to market risk.*

It is agreed that the ability of banks can be significantly examined over time from a number of financial ratios that constitute the CAMELS rating. With respect to predicting bank failure, Barker and Holdsworth (1993) found that CAMEL ratings are useful, even after controlling for a wide range of publicly available information about the condition and performance of banks.

Cole and Gunther (1998) examined a similar question and find that although CAMEL ratings contain useful information, it decays quickly. Hirtle and Lopez (1999) examined the usefulness of past CAMEL ratings in assessing banks' current conditions. Jose A. Lopez, a notable economist asserted that CAMELS ratings are especially useful to financial market participants, given the informational asymmetries in the commercial banking industry. Since banks fund projects not readily financed in public capital markets, outside monitors should find it difficult to completely assess banks' financial conditions. As the ratings are confidential, their use in research studies has been limited.

Therefore this study has evaluated the results of study vunits under CAMELS ratings from 2005-06 to 2011-12, anticipating that more efficient institutions would tend to have high CAMELS ratings than less efficient institutions.

Capital Adequacy

The capital adequacy is defined as the ratio of total capital equity to total assets (capital/asset). A bank's capital ratio is a very important index. It can act as a saver for potential risks, as well as, for important decisions that banking institutions take with regard to growth (Shelagh, 2005) and their future course in general. In order for a banking institution to have capital adequacy, this ratio should be higher than 8%, namely the total amount of capital must be over 8% of its risk-weighted assets.

Table 4.15
Capital Adequacy Ratio for the period 2005-06 to 2011-12

Capital Adequacy (in %)								
Ratios	**Bank**	**2005-2006**	**2006-2007**	**2007-2008**	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**
Capital Adequacy Ratio (CAR)	BOB	12.61	13.65	11.8	12.91	12.88	12.84	13.02
	HDFC	12.16	11.41	13.08	13.6	15.09	16.45	15.32
	ICICI	11.78	13.35	11.69	14.92	15.92	19.14	17.63
	OBC	9.21	11.04	12.51	12.12	12	10.83	12.3
	PNB	14.78	11.95	12.29	12.96	12.59	12.97	11.76
	SBI	12.45	11.88	12.34	13.54	12.97	12	10.69
Debt-Equity Ratio	BOB	0.56	0.9	0.45	0.85	0.99	0.88	1.06
	HDFC	1.16	0.86	0.95	0.68	0.65	0.6	0.57
	ICICI	3.27	2.17	2.87	1.85	1.88	1.83	1.99
	OBC	0.41	0.33	0.41	0.62	0.46	0.67	0.55
	PNB	0.64	0.95	0.56	1.08	0.95	1.19	1.58
	SBI	0.94	1.29	1.79	1.49	1.45	1.56	1.84
Advances to Assets	BOB	45.85	52.84	58.42	59.41	63.20	62.89	63.81
	HDFC	49.64	47.65	51.41	47.60	53.93	56.54	57.67
	ICICI	52.83	57.99	56.72	56.35	57.47	49.80	53.20
	OBC	46.79	56.97	59.70	60.16	60.84	60.57	59.29
	PNB	47.84	51.34	59.43	60.04	62.65	62.90	63.99
	SBI	44.01	52.98	59.52	57.71	56.22	59.96	61.79
Govt..Secs. to Total Investments	BOB	78.24	74.06	75.14	78.10	77.89	82.45	84.49
	HDFC	58.02	69.14	74.41	64.74	92.66	86.84	75.64
	ICICI	68.31	71.57	74.15	67.76	61.59	56.71	48.27
	OBC	79.33	80.92	83.25	85.95	87.49	91.53	86.99
	PNB	81.30	81.40	81.06	81.90	86.03	84.88	83.54
	SBI	87.24	83.24	79.30	74.47	82.25	77.32	78.82

Source: Computed on the basis of CMIE Data Source

Table 4.15 represents the descriptive statistics of the capital adequacy ratio of the selected merged banks for the period of 2005-06 to 2011-12. From the table it is found that BOB have been performing consistently on all the ratios of capital adequacy followed by HDFC and ICICI. Other public sector banks like PNB, SBI and OBC have followed these high performers closely.

Table 4.16
Performance Ratings based on Mean Capital Adequacy Ratio

Capital Adequacy Ratio- Select Statistics (%)									
Ratios	**Banks**	**N**	**Mean Ratio**	**Standard Deviation**	**F-value**	**Sig.**	**ACGR**	**Sig.**	**Rank**
Capital Adequacy Ratio (CAR)	BOB	6	12.85	0.5960	5.352	0.001	0.042	0.975	3
	HDFC	6	14.16	1.8164			6.686	0.010	2
	ICICI	6	15.44	2.7356			8.746	0.025	1
	OBC	6	11.80	0.6950			0.280	0.869	6
	PNB	6	12.42	0.5092			0.150	0.898	4
	SBI	6	12.24	0.9821			-1.853	0.395	5
Debt – Equity Ratio	BOB	6	0.86	0.2130	31.834	0.000	8.896	0.294	4
	HDFC	6	0.72	0.1522			-9.465	0.011	1
	ICICI	6	2.10	0.3984			-4.923	0.259	2
	OBC	6	0.51	0.1297			11.242	0.090	6
	PNB	6	1.05	0.3351			14.296	0.100	5
	SBI	6	1.57	0.2100			3.890	0.276	3
Advances to Assets	BOB	6	60.10	4.1753	4.386	0.004	3.566	0.011	1
	HDFC	6	52.47	4.3315			3.976	0.021	6
	ICICI	6	55.26	3.1531			-2.263	0.099	5
	OBC	6	59.59	1.4010			0.730	0.237	3
	PNB	6	60.06	4.6185			3.825	0.024	2
	SBI	6	58.03	3.1293			2.210	0.088	4
Govt. Secs. to Total Invest.	BOB	6	78.69	4.0695	8.785	0.000	2.705	0.001	4
	HDFC	6	77.24	10.6053			3.698	0.311	5
	ICICI	6	63.34	9.7801			-7.870	0.004	6
	OBC	6	86.02	3.6647			1.914	0.040	1
	PNB	6	83.14	2.0214			0.910	0.122	2
	SBI	6	79.23	3.2149			-0.710	0.527	3

Source: Computed on the basis of CMIE Data Source

Table 4.16 depicts the capital adequacy variable of selected merged banks at significant levels based on mean scores and standard deviation. With regard to the capital adequacy ratio, ICICI bank performed high followed by HDFC, BOB, PNB, SBI and OBC respectively. As for as debt-equity ratio, HDFC bank performed well followed closely by ICICI, SBI, BOB, PNB and OBC respectively. With respect to advances to assets, BOB had given high advances followed by PNB, OBC, SBI, ICICI and HDFC respectively. In government sector to total investment, OBC bank performs well, followed by PNB, SBI, BOB, HDFC and ICICI.

Table 4.17
Group Rankings of Capital Adequacy Ratio

Group Rankings of Capital Adequacy Ratio						
Ratios	**BOB**	**HDFC**	**ICICI**	**OBC**	**PNB**	**SBI**
Capital Adequacy Ratio	3	2	1	6	4	5
Debt – Equity Ratio	4	1	2	6	5	3
Advances to Assets	1	6	5	3	2	4
Govt. secs. to Total Invest.	4	5	6	1	2	3
Average	3	3.5	3.5	4	3.25	3.75
Rank	**1**	**3.5**	**3.5**	**6**	**2**	**5**

Source: Computed on the basis of CMIE Data Source

Table 4.17 represents the group ranking of capital adequacy ratio of selected merged banks. From the table, it is found that BOB's overall capital adequacy ratio is high compared to that of other banks in this study. PNB, HDFC, ICICI, SBI and OBC are ranked from second to sixth respectively. From this observation, we can infer that both public and private sector banks involved in this study have been performing well in terms of capital adequacy dimension. While HDFC and ICICI have performed well in debt-equity ratio and capital adequacy sub-dimension; public sector banks such as BOB, PNB, SBI and OBC have been good in advances to assets sub-dimension.

Assets Quality

The quality of assets (A) is the ratio of the total loans to total assets (loan/asset) utilized. It determines a bank's ability to detect, measure, monitor and regulate credit risks is also assessed, while taking into account any provisions against bad and doubtful claims. Hence, a high leverage may reflect poorer asset quality, and an increase in this ratio is expected to shorten survival time.

Table 4.18 represents the descriptive statistics of the assets quality ratio of the selected merged banks for the period of 2005-06 to 2011-12. From the table it is found that BOB have been performing consistently on all the ratios of capital adequacy followed by HDFC and PNB. Other merged banks selected for this study such as OBC, SBI and ICICI are placed from fourth to sixth respectively.

Table 4.18
Asset Quality Ratio for the period 2005-06 to 2011-12

Assets Quality (in %)								
Ratios	**Bank**	**2005-2006**	**2006-2007**	**2007-2008**	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**
Gross NPA to NET Advances	BOB	7.65	3.99	2.50	1.86	1.29	1.37	1.38
	HDFC	1.72	1.45	1.40	1.43	2.01	1.44	1.06
	ICICI	3.11	1.52	2.11	3.36	4.42	5.23	4.64
	OBC	9.93	6.30	3.29	2.35	1.54	1.76	2.00
	PNB	6.19	4.21	3.51	2.78	1.62	1.72	1.81
	SBI	6.15	3.68	2.96	3.08	2.90	3.09	3.35
Net NPAs to Net Advances	BOB	1.45	0.87	0.6	0.47	0.31	0.34	0.35
	HDFC	0.24	0.44	0.43	0.47	0.63	0.31	0.19
	ICICI	1.65	0.72	1.02	1.55	2.09	2.12	1.11
	OBC	1.29	0.49	0.49	0.99	0.65	0.87	0.98
	PNB	0.2	0.29	0.76	0.64	0.17	0.53	0.85
	SBI	2.65	1.88	1.56	1.78	1.79	1.72	1.63
Total Investments to total Assets	BOB	39.16	30.97	24.41	24.43	23.14	21.98	19.88
	HDFC	37.57	38.59	33.18	36.71	30.70	26.41	25.57
	ICICI	29.97	28.39	26.43	27.83	27.13	33.22	33.12
	OBC	33.92	28.53	26.79	26.40	25.30	25.96	26.01
	PNB	40.13	28.25	27.80	27.12	25.67	26.20	25.15
	SBI	42.86	32.89	26.31	26.24	28.59	28.06	24.14
Net NPAs to Total Assets	BOB	0.65	0.46	0.35	0.27	0.20	0.22	0.22
	HDFC	0.12	0.21	0.22	0.22	0.34	0.18	0.11
	ICICI	0.89	0.42	0.58	0.87	1.20	1.06	0.59
	OBC	0.61	0.28	0.29	0.59	0.39	0.53	0.58
	PNB	0.09	0.14	0.45	0.38	0.11	0.33	0.54
	SBI	1.16	0.99	0.93	1.03	1.00	1.03	1.01

Source: Computed on the basis of CMIE Data Source

Table 4.19
Performance Ratings based on Mean Assets Quality Ratios

Assets Quality Ratio – Select Statistics (in %)									
Ratios	**Banks**	**N**	**Mean Ratio**	**Standard Deviation**	**F-value**	**Sig.**	**ACGR**	**Sig.**	**Rank**
Gross NPA to Net Advances	BOB	6	2.07	1.0478	2.643	0.043	-19.25	0.014	2
	HDFC	6	1.47	0.3057			-3.218	0.562	1
	ICICI	6	3.55	1.4831			27.777	0.007	6
	OBC	6	2.87	1.7872			-20.51	0.041	4
	PNB	6	2.61	1.0781			-17.88	0.012	3
	SBI	6	3.18	0.2911			-1.154	0.639	5
Net NPAs to Net Advances	BOB	6	0.49	0.2151	20.130	0.000	-17.36	0.017	2
	HDFC	6	0.41	0.1495			-13.03	0.179	1
	ICICI	6	1.44	0.5832			14.235	0.229	5
	OBC	6	0.75	0.2324			14.592	0.069	4
	PNB	6	0.54	0.2661			8.855	0.628	3
	SBI	6	1.73	0.1162			-1.179	0.528	6
Total Investments to Total Assets	BOB	6	24.14	3.7582	4.010	0.007	-7.121	0.007	1
	HDFC	6	31.86	5.3136			-8.008	0.008	6
	ICICI	6	29.35	3.0291			4.173	0.081	5
	OBC	6	26.50	1.1124			-1.698	0.069	2
	PNB	6	26.70	1.2249			-2.299	0.004	3
	SBI	6	27.71	2.9865			-3.557	0.166	4
Net NPA to Total Assets	BOB	6	0.29	0.1007	22.121	0.000	-14.25	0.018	2
	HDFC	6	0.21	0.0747			-9.257	0.316	1
	ICICI	6	0.79	0.3061			11.564	0.306	5
	OBC	6	0.44	0.1419			15.476	0.062	4
	PNB	6	0.33	0.1705			13.979	0.464	3
	SBI	6	1.00	0.0371			1.082	0.278	6

Source: Computed on the basis of CMIE Data Source

Table 4.19 depicts the assets quality ratio of selected merged banks at significant levels based on mean scores and standard deviation. With regard to Gross NPA to Net advances, HDFC bank performed high followed by BOB, PNB, OBC, SBI and ICICI respectively. As for as Net NPA to Net advances , HDFC bank performed high followed by BOB, PNB, OBC, ICICI and SBI respectively. With respect to total investments, BOB had given high advances followed by OBC, PNB, SBI, ICICI and HDFC respectively. In Net NPA to total assets, HDFC bank performs well, followed by BOB, PNB, OBC, ICICI and SBI.

Table 4.20
Group Rankings Based on Asset Quality

Group Rankings of Asset Quality						
Ratios	**BOB**	**HDFC**	**ICICI**	**OBC**	**PNB**	**SBI**
Gross NPAs to Net Advances	2	1	6	4	3	5
Net NPAs to Net Advances	2	1	5	4	3	6
Total Investments to Total Assets	1	6	5	2	3	4
Net NPAs to Total Assets	2	1	5	4	3	6
Average	1.75	2.25	5.25	3.5	3	5.25
Rank	**1**	**2**	**5.5**	**4**	**3**	**5.5**

Source: Computed on the basis of CMIE Data Source

Table 4.20 represents the group ranking based on assets quality ratio of selected merged banks. From the table, it is found that BOB's overall assets quality ratio is high compared to that of other banks in this study. HDFC, PNB, OBC, ICICI, and SBI are ranked from second to sixth respectively. From this observation, irrespective of the ownership-public or private, the selected merged banks have performed well. Interestingly, it is observed that larger banks such as ICICI and SBI assets quality ratio are comparably lesser than their smaller counterparts.

Management Efficiency

Management forms the mechanism that makes decisions to ensure the bank's smooth course of operation handles risks and exercises control. Thus, proper management in line with regulations in force is essential for the bank's smooth course of operation.

Table 4.21 represents the descriptive statistics of management efficiency ratio of the selected merged banks for the period of 2005-06 to 2011-12. From the table it is found that PNB have been performing consistently on all the ratios of capital adequacy followed by SBI and HDFC. Other merged banks selected for this study like BOB, OBC and ICICI have followed these high performers in the respective order.

Table 4.21
Management Efficiency Ratio for the period 2005-06 to 2011-12

Management Efficiency								
Ratios	**Banks**	**2005-2006**	**2006-2007**	**2007-2008**	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**
Totals Advances to Total Deposits (in %)	BOB	53.36	63.97	66.94	70.18	74.46	72.55	74.87
	HDFC	70.33	62.84	68.74	62.94	69.24	75.17	76.70
	ICICI	89.15	88.54	84.97	92.30	99.98	89.70	95.91
	OBC	52.87	66.89	68.97	70.08	69.64	69.43	68.97
	PNB	58.56	62.35	69.07	71.79	73.75	74.84	77.38
	SBI	55.14	68.89	77.46	77.55	73.11	78.58	81.03
Business Per Employee (Rs. Lakh)	BOB	53.36	63.97	66.94	70.18	74.46	72.55	74.87
	HDFC	70.33	62.84	68.74	62.94	69.24	75.17	76.70
	ICICI	89.15	88.54	84.97	92.30	99.98	89.70	95.91
	OBC	52.87	66.89	68.97	70.08	69.64	69.43	68.97
	PNB	58.56	62.35	69.07	71.79	73.75	74.84	77.38
	SBI	55.14	68.89	77.46	77.55	73.11	78.58	81.03
Profit Per Employee (Rs. Lakh)	BOB	0.02	0.02	0.03	0.04	0.06	0.08	0.11
	HDFC	0.09	0.07	0.06	0.05	0.04	0.06	0.07
	ICICI	0.11	0.1	0.09	0.1	0.11	0.09	0.1
	OBC	0.07	0.05	0.06	0.06	0.06	0.07	0.09
	PNB	0.02	0.02	0.03	0.04	0.06	0.07	0.08
	SBI	0.02	0.02	0.02	0.04	0.05	0.04	0.04

Source: Computed on the basis of CMIE Data Source

Table 4.22 depicts the management efficiency ratio of selected merged banks at significant levels based on mean scores and standard deviation. With regard to total advances to total deposits, ICICI bank performed high followed by SBI, BOB, OBC, HDFC and PNB respectively. As for as business per employee ratio, OBC bank performed well followed closely by ICICI, BOB, PNB, HDFC and SBI respectively. With respect to profit per employee, ICICI have accrued high profits followed by OBC, BOB, HDFC, PNB and SBI respectively.

Table 4.22
Performance Ratings based on Management Efficiency Ratio

Management Efficiency Ratio – Select Statistics									
Ratios	**Banks**	**N**	**Mean Ratio**	**Standard Deviation**	**F-value**	**Sig.**	**ACGR**	**Sig.**	**Rank**
Total Advances to total Deposits in (%)	BOB	6	70.50	4.3451	21.338	0.000	3.155	0.007	3
	HDFC	6	69.27	5.8602			3.963	0.028	5
	ICICI	6	91.90	5.3978			1.852	0.220	1
	OBC	6	69.00	1.1149			0.478	0.262	4
	PNB	6	71.53	5.3009			3.925	0.005	6
	SBI	6	76.10	4.3665			2.299	0.102	2
Business per Employees (Rs. Lakh)	BOB	6	8.15	3.3462	4.345	0.004	25.789	0.000	3
	HDFC	6	5.93	1.0973			-2.697	0.600	5
	ICICI	6	9.32	1.6218			-4.982	0.268	2
	OBC	6	10.22	3.3467			20.493	0.000	1
	PNB	6	6.21	2.5965			25.446	0.000	4
	SBI	6	5.02	1.5902			19.447	0.000	6
Profit Per Employee (Rs. Lakh)	BOB	6	0.06	0.0339	7.173	0.000	40.381	0.000	3.5
	HDFC	6	0.06	0.0117			-0.636	0.917	3.5
	ICICI	6	0.10	0.0075			0.273	0.900	1
	OBC	6	0.07	0.0138			10.206	0.011	2
	PNB	6	0.05	0.0237			32.611	0.000	5
	SBI	6	0.04	0.0122			17.917	0.068	6

Source: Computed on the basis of CMIE Data Source

Table 4.23
Group Rankings based on Management Efficiency Ratio

Group Rankings of Management Efficiency						
Ratios	**BOB**	**HDFC**	**ICICI**	**OBC**	**PNB**	**SBI**
Total Advances to Total Deposits (in %)	3	5	1	4	6	2
Business Per Employee (Rs. Lakh)	3	5	2	1	4	6
Profit Per Employee	3.5	3.5	1	2	5	6
Average	3.17	4.5	1.3	2.33	5	4.67
Rank	**3**	**4**	**1**	**2**	**6**	**5**

Source: Computed on the basis of CMIE Data Source

Table 4.23 represents the group ranking based on management efficiency of selected merged banks. From the table, it is found that ICICI's management efficiency ratio is high compared to that of other banks in this study. OBC, BOB, HDFC, SBI and PNB are ranked from second to sixth respectively. From this observation, irrespective of the ownership-public or private, management efficiency of the selected merged banks are good. Interestingly, it is also observed that public sector banks such as SBI and PNB have to improve on their management efficiency dimension compared to its counterparts.

Earning Ability

Earnings and profitability form the primary source for capital base increases and are examined in relation to interest rate policies and provisions adequacy. These ratios, also, help support a bank's current and future activities. Strong profits combined with its earnings profile reflect a bank's ability to support current and future tasks. This ratio reflects the bank's ability to absorb losses, expand its financing, as well as, its ability to pay dividends to its shareholders, and helps develop an adequate amount of own capital.

Table 4.24 represents the descriptive statistics of the earning ability ratio of the selected merged banks for the period of 2005-06 to 2011-12. It is found that HDFC have been performing consistently on all the ratios of earning quality followed by PNB, ICICI, BOB, SBI and OBC respectively.

Table 4.25 depicts the earning ability ratio of selected merged banks at significant levels based on mean scores and standard deviation. With regard to operating profits to average working funds, HDFC performed high followed by PNB, ICICI, BOB, SBI and OBC respectively. As for as spread to total assets ratio, HDFC bank performed well followed closely PNB, SBI, BOB, ICICI and OBC respectively. With respect to net profit to average assets, HDFC performed high followed by PNB, BOB, SBI and respectively. In interest income to total income, OBC bank performs well, followed by PNB, BOB, SBI, HDFC and ICICI. Finally, in non-interest income to total income, ICICI performed well followed by HDFC, SBI, BOB, PNB and OBC respectively.

Table 4.24
Earning Ability Ratio for the period 2005-06 to 2011-12

Earning Ability								
Ratios	**Bank**	**2005-2006**	**2006-2007**	**2007-2008**	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**
Operating Profit to Average Working Funds	BOB	2.45	1.92	1.94	1.96	2.22	2.03	2.22
	HDFC	2.56	2.75	2.98	3.13	2.94	3.33	3.12
	ICICI	2.18	1.98	2.05	2.14	2.33	2.72	2.37
	OBC	2.54	2.06	1.9	1.48	1.63	1.94	2.23
	PNB	2.25	2.18	2.41	2.25	2.52	2.69	2.72
	SBI	2.61	2.27	1.86	1.96	2.05	1.75	2.17
Spread to Total Assets	BOB	3.15	2.80	2.50	2.18	2.26	2.13	2.46
	HDFC	3.26	3.41	3.91	3.94	3.92	3.57	3.73
	ICICI	1.67	1.85	1.92	2.03	2.31	2.20	2.18
	OBC	2.82	2.72	2.29	1.84	1.77	2.17	2.64
	PNB	3.17	3.21	3.21	2.78	2.77	2.86	3.12
	SBI	2.87	3.15	2.70	2.36	2.16	2.25	2.66
Net Profit to Average Assets	BOB	0.75	0.79	0.8	0.89	1.1	1.21	1.33
	HDFC	1.42	1.39	1.38	1.42	1.42	1.45	1.57
	ICICI	1.36	1.21	1.04	1.12	0.96	1.08	1.34
	OBC	1.53	0.99	0.87	0.43	0.88	0.91	1
	PNB	1.23	1.06	1	1.13	1.39	1.44	1.31
	SBI	0.99	0.92	0.86	1.04	1.08	0.91	0.73
Interest Income to Total Income	BOB	82.71	81.35	86.26	85.04	84.42	83.28	87.65
	HDFC	78.27	78.03	79.53	79.89	81.16	78.07	80.61
	ICICI	72.47	73.66	76.76	77.90	78.72	77.09	78.01
	OBC	87.17	86.75	86.32	89.27	89.17	89.28	92.36
	PNB	79.83	83.55	85.32	87.56	84.80	85.33	87.97
	SBI	80.04	82.70	83.34	83.76	83.34	81.63	82.66
Non-Interest Income to Total Income	BOB	17.29	18.65	13.74	14.96	15.58	16.72	12.35
	HDFC	21.73	21.97	20.47	20.11	18.84	21.93	19.39
	ICICI	27.56	26.64	23.24	22.1	21.28	22.91	21.99
	OBC	12.83	13.25	13.68	10.73	10.83	10.72	7.64
	PNB	20.17	16.45	14.68	12.44	15.2	14.67	12.03
	SBI	19.96	17.3	16.66	16.24	16.66	18.37	17.34

Source: Computed on the basis of CMIE Data Source

Table 4.25
Performance Ratings based on Earning Ability Ratio

Earnings Quality Ratio – Select Statistics (in %)									
Ratios	**Bank**	**N**	**Mean Ratio**	**Standard Deviation**	**F-value**	**Sig.**	**ACGR**	**Sig.**	**Rank**
Operating Profit to average working funds	BOB	6	2.05	0.1380	22.101	0.000	2.859	0.060	4
	HDFC	6	3.04	0.1981			2.610	0.095	1
	ICICI	6	2.27	0.2703			5.375	0.035	3
	OBC	6	1.87	0.2761			1.600	0.710	6
	PNB	6	2.46	0.2232			4.527	0.012	2
	SBI	6	2.01	0.1936			-1.032	0.703	5
Spread to Total Assets	BOB	6	2.39	0.2505	28.517	0.000	-3.071	0.239	4
	HDFC	6	3.75	0.2186			0.488	0.771	1
	ICICI	6	2.08	0.1779			3.957	0.035	5
	OBC	6	2.24	0.3946			-0.994	0.844	6
	PNB	6	2.99	0.2112			-1.396	0.468	2
	SBI	6	2.55	0.3668			-4.143	0.243	3
Net profit to Average Assets	BOB	6	1.02	0.2266	9.911	0.000	12.292	0.001	4
	HDFC	6	1.44	0.0691			2.187	0.026	1
	ICICI	6	1.13	0.1341			1.350	0.684	2
	OBC	6	0.85	0.2113			2.608	0.776	6
	PNB	6	1.22	0.1830			6.975	0.039	3
	SBI	6	0.92	0.1263			-2.676	0.482	5
Interest Income to Total Income	BOB	6	84.67	2.2164	37.042	0.000	0.746	0.280	3
	HDFC	6	79.55	1.2909			0.352	0.427	5
	ICICI	6	77.02	1.7892			0.890	0.118	6
	OBC	6	88.86	2.1723			1.188	0.013	1
	PNB	6	85.76	1.6916			0.648	0.195	2
	SBI	6	82.91	0.7533			-0.199	0.421	4
Non-Interest Income to Total Income	BOB	6	15.33	2.2164	37.042	0.000	-4.007	0.282	4
	HDFC	6	20.45	1.2909			-1.371	0.420	2
	ICICI	6	22.98	1.7892			-2.770	0.121	1
	OBC	6	11.14	2.1723			-9.452	0.017	6
	PNB	6	14.25	1.6916			-3.829	0.205	5
	SBI	6	17.10	0.7533			0.948	0.425	3

Source: Computed on the basis of CMIE Data Source

Table 4.26
Group Rankings based on Earning Ability

Group Rankings of Earning Ability						
Ratios	**BOB**	**HDFC**	**ICICI**	**OBC**	**PNB**	**SBI**
Operating Profit to Average W/F	4	1	3	6	2	5
Spread to Total Assets	4	1	5	6	2	3
Net Profit to Average Assets	4	1	2	6	3	5
Interest Income to Total Income	3	5	6	1	2	4
Non-Interest Income to Total Income	4	2	1	6	5	3
Average	3.8	2	3.4	5	2.8	4
Rank	**4**	**1**	**3**	**6**	**2**	**5**

Source: Computed on the basis of CMIE Data Source

Table 4.26 represents the group ranking based on earning ability of selected merged banks. From the table, it is found that HDFC bank earning ability ratio is high compared to that of other banks in this study. PNB, ICICI, BOB, SBI and OBC are ranked from second to sixth respectively. It is hence referred that that private sector banks perform well on earning ability than public banks.

Liquidity Ratio

Liquidity ratios are referred as the overall liquidity risk, the ratio of liquid assets to total assets (liquid/assets) used. It tests the bank's ability to deal with changes in its financing resources, as well as, changes in market conditions which alter the fast liquidation of its assets, with the least possible losses.

Table 4.27 represents the descriptive statistics of the liquidity ratio of the selected merged banks for the period of 2005-06 to 2011-12. From the table it is found that BOB have been performing consistently on all the ratios of liquidity followed by OBC and HDFC. Other merged banks selected in this study such as ICICI, PNB and SBI have followed these high performers closely.

Table 4.27
Liquidity Ratio for the period 2005-06 to 2011-12

Liquidity (in %)								
Ratios	**Bank**	**2005-2006**	**2006-2007**	**2007-2008**	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**
Liquid assets to Total Assets	BOB	9.78	11.87	12.77	12.42	10.63	12.74	13.93
	HDFC	8.70	9.41	9.91	11.09	9.55	13.45	10.69
	ICICI	7.68	6.76	10.75	9.50	7.89	10.68	8.38
	OBC	13.95	9.38	10.16	11.26	10.86	10.59	11.80
	PNB	8.78	17.06	9.63	9.46	8.67	7.91	7.85
	SBI	8.55	9.02	9.17	9.34	10.82	8.18	10.03
Govt. Secs. to total Assets	BOB	30.64	22.93	18.34	19.08	18.02	18.12	16.80
	HDFC	21.80	26.68	24.69	23.76	28.45	22.94	19.34
	ICICI	20.48	20.32	19.60	18.86	16.71	18.84	15.99
	OBC	26.91	23.09	22.30	22.70	22.14	23.76	22.63
	PNB	32.63	22.99	22.54	22.21	22.08	22.24	21.01
	SBI	37.39	27.38	20.87	19.54	23.52	21.70	19.02
Liquid Assets to Demand Deposits	BOB	134.68	160.58	185.12	190.66	166.68	187.42	215.84
	HDFC	42.16	46.96	45.70	51.39	61.55	80.43	63.86
	ICICI	100.73	102.82	173.66	154.07	138.53	125.41	98.02
	OBC	174.96	110.06	118.11	131.59	158.55	142.89	203.12
	PNB	88.95	148.24	95.02	105.84	113.82	98.97	110.63
	SBI	69.46	65.53	63.38	68.75	94.27	70.31	93.66
Liquid Assets to Total Deposits	BOB	11.38	14.37	14.63	14.67	12.52	14.70	16.35
	HDFC	12.33	12.42	13.26	14.67	12.26	17.89	14.22
	ICICI	12.95	10.32	16.10	15.56	13.72	19.24	15.11
	OBC	15.76	11.01	11.73	13.12	12.43	12.14	13.73
	PNB	10.75	20.71	11.19	11.31	10.21	9.41	9.49
	SBI	10.71	11.72	11.93	12.55	14.07	10.72	13.16

Source: Computed on the basis of CMIE Data Source

Table 4.28
Performance Ratings based on Liquidity Ratio

Liquidity Ratio – Select Statistics (in %)									
Ratios	**Bank**	**N**	**Mean Ratio**	**Standard Deviation**	**F-value**	**Sig.**	**ACGR**	**Sig.**	**Rank**
Liquid Assets to Total Assets	BOB	6	12.39	1.0961	2.604	0.045	1.838	0.460	1
	HDFC	6	10.68	1.5049			4.095	0.243	2.5
	ICICI	6	8.99	1.5980			2.513	0.627	6
	OBC	6	10.68	0.8475			3.594	0.045	2.5
	PNB	6	10.10	3.4921			-12.21	0.035	4
	SBI	6	9.43	0.9054			0.962	0.722	5
Govt. Secs. To Total Assets	BOB	6	18.88	2.1155	6.985	0.000	-4.601	0.040	5
	HDFC	6	24.31	3.1554			-4.602	0.155	1
	ICICI	6	18.39	1.6849			-4.025	0.046	6
	OBC	6	22.77	0.5873			0.185	0.799	2
	PNB	6	22.18	0.6586			-1.408	0.020	3
	SBI	6	22.01	3.0839			-4.248	0.204	4
Liquid assets to Demand Deposits	BOB	6	184.38	19.5892	24.572	0.000	4.026	0.120	1
	HDFC	6	58.32	13.1629			10.243	0.035	6
	ICICI	6	132.09	29.3761			-3.706	0.544	3
	OBC	6	144.05	33.7174			11.537	0.009	2
	PNB	6	112.09	19.0501			-3.559	0.394	4
	SBI	6	75.98	14.1385			7.137	0.106	5
Liquid Assets to Total Deposits	BOB	6	14.54	1.2195	1.706	0.164	1.443	0.545	2
	HDFC	6	14.12	2.0792			4.068	0.275	3
	ICICI	6	15.01	2.9344			6.838	0.211	1
	OBC	6	12.36	0.9723			3.349	0.066	4.5
	PNB	6	12.05	4.3172			-12.13	0.047	6
	SBI	6	12.36	1.1734			1.071	0.690	4.5

Source: Computed on the basis of CMIE Data Source

Table 4.28 depicts the liquidity ratio of selected merged banks at significant levels based on mean scores and standard deviation. With regard to liquid assets to total assets, BOB performed high followed by HDFC, OBC, PNB, SBI and ICICI respectively. As for as government secs to total assets, HDFC bank performed well followed closely OBC, PNB, SBI, BOB, and ICICI respectively. With respect to liquid assets to demand deposits, BOB performed high followed by OBC, ICICI, PNB, and HDFC respectively. In liquid assets to total deposit, ICICI bank performs well, followed by BOB, HDFC, SBI, OBC and PNB.

Table 4.29
Group Rankings based on Earning Ability

Group Rankings based on Liquidity						
Ratios	**BOB**	**HDFC**	**ICICI**	**OBC**	**PNB**	**SBI**
Liquid Assets to Total Assets	1	2.5	6	2.5	4	5
Govt. Secs. to Total Assets	5	1	6	2	3	4
Liquid Assets to Demand Deposits	1	6	3	2	4	5
Liquid Assets to Total Deposits	2	3	1	4.5	6	4.5
Average	2.25	3.13	4	2.75	4.25	4.63
Rank	**1**	**3**	**4**	**2**	**5**	**6**

Source: Computed on the basis of CMIE Data Source

Table 4.29 represents the group ranking based on liquidity ratio of selected merged banks. From the table, it is found that the liquidity position of BOB is high compared to that of other banks in this study. OBC, HDFC, ICICI, PNB and SBI are ranked from second to sixth respectively. Interestingly, it is observed that the liquidity status of and the ownership of the firms-public or private are independent.

Sensitivity to Market Risk

Sensitivity to market risk to evaluate the market risk associated with changing interest rates and other factors. A bank's assessment on sensitivity towards market risks examines the extent to which potential changes in interest rates, foreign currency exchange rates, product purchase and selling prices, affect the bank's profits and the value of its assets.

Table 4.30
Sensitivity to Market Risk Ratio for the period 2005-06 to 2011-12

Sensitivity To Market Risk						
Year	**BOB**	**HDFC**	**ICICI**	**OBC**	**PNB**	**SBI**
2005-2006	1.196351	0.718801	1.18554	0.693384	1.006316	1.022601
2006-2007	1.011652	0.865396	0.956943	1.043502	1.003509	0.918049
2007-2008	1.151837	0.985167	1.250465	1.117582	1.045521	1.06525
2008-2009	0.812647	1.005111	1.602898	0.723964	0.911264	1.050961
2009-2010	0.855586	0.792542	1.462873	0.939755	0.837823	1.171594
2010-2011	0.700986	0.981487	1.479043	1.181009	0.836442	1.157863
Mean	0.954843	0.891417	1.322961	0.949866	0.940146	1.064386
S.D.	0.197421	0.118387	0.236817	0.203588	0.091166	0.093352
Rank	**4**	**1**	**6**	**3**	**2**	**5**

Source: Computed on the basis of CMIE Data Source

Table 4.30 depicts the sensitivity to market risk ratio of selected merged banks at significant levels based on mean scores and standard deviation. With regard to sensitivity to market risks, HDFC bank is better prepared followed by PNB, OBC, BOB, SBI and ICICI respectively.

Table 4.31
Performance of selected merged banks by CAMELS ratings

Overall Rankings ('CAMELS' Ranking) Of Merged Banks						
	BOB	**HDFC**	**ICICI**	**OBC**	**PNB**	**SBI**
C: Capital Adequacy Ratio	1	3.5	3.5	6	2	5
A: Assets Quality	1	3	5.5	4	2	5.5
M: Management Efficiency	3	4	1	2	6	5
E: Earnings Quality	4	1	3	6	2	5
L: Liquidity	1	3	4	2	5	6
S: Sensitivity To Market Risk	4	1	6	3	2	5
Average Rank	2.33	2.58	3.83	3.83	3.16	5.25
Rank	**1**	**2**	**4.5**	**4.5**	**3**	**6**

Source: Computed on the basis of CMIE Data Source

Table 4.31 represents the performance of the selected merged banks based on CAMELS rating. From the table, it is observed that among the selected merged banks, Bank of Baroda performed well on the aggregate CAMELS dimension. HDFC, PNB, ICICI, OBC and SBI banks performed comparably lesser and are ranked from second to sixth in the given order. From the combined rating assessment of selected merged banks using the CAMELS method it emerges that it that private sector merged banks are better placed compared to that of public sector merged banks excluding Bank of Baroda.

From the findings, it is concluded that there have been remarkable increase in liquidation position of OBC and SBI during shorter time period of 3 year. The State Bank of India is seen to have performed better compared to other public sector banks against event after its acquisition activity. On the other hand, the performance of private sector banks is found to be better in pre-period compared to their performance in post-acquisition period. It is concluded that there is notable change in liquidity position of the public sector banks due to their acquisition activities whereas there have been significant decline their activities in turning their assets for generating income. It is however found that the net earnings of public sector banks in shorter-time periods of have increased significantly after acquiring other banks. It is further concluded that the performance of public sector banks in terms of generating income relative to their investment in fixed assets is significantly and negatively affected whereas their performance in respect of their net earnings is positively influenced by acquisition deals and the financial performance of private sector banks during shorter time period of 3 year become poor after their acquisition deals.

It is also identified that the deals pertaining to acquiring other (private limited) banks by private sector banks have significant negative effect on their liquidity position as well as on their overall financial performance. However, overall from combining the financial performance of both public and private sectors banks, it is identified that that the banks' activities in respect of acquiring other private limited banks does not tend to make any notable changes in their liquidity position and profitability levels, but the efficiency of the banks in generating income relative to their investment in fixed assets has declined in shorter time period. It is finally concluded the net earnings in longer time period of five year tend to increase against taking over of private limited banks by public and private sector banks in India.

Conclusion

In the era of economic liberalization, banks, their regulations and their regulators have changed considerably. The Indian banking industry has undergone rapid growth during post financial sector reform period. Merger and acquisition is emerging as a reality today. It is found that private merged banks such ICICI and HDFC has an edge over its counterpart from the public sector such as Oriental Bank of Commerce, Bank of Baroda, etc. on dimensions such as capital adequacy, management efficiency and earning quality. At the same time, public sector banks such as State Bank of India and Bank of Baroda performs relatively better in asset quality dimension and liquidity management dimension respectively when compared to its private sector counterparts. To summarize, CAMEL rating of the merged banks informs us that both the public and the private banks are performing well on different dimensions and overall private sector merged banks perform better than that of its public counterparts.

It is argued that the direct beneficiary of CAMELS ratings would be depositors and holders of banks' securities. It is also concluded that CAMELS rating does reveal unfavorable private information about bank conditions to the stock market. This information may reach the public in several ways, such as through bank financial statements made after a downgrade. The results suggest that bank management may reveal favorable private information in advance, while supervisors in effect force the release of unfavorable information.

CHAPTER V

STOCK PRICE REACTION OF THE MERGED BANKS – AN EVENT STUDY APPROACH

Abnormal and Cumulative Abnormal Returns of Merged Banks both under Market Model (MM) and Market Adjusted Model (MAM).

The new environment in banking demands restructuring and reorienting the policy goals of banks. One way to adapt to the complexity is through mergers. Particularly during the post-liberalization period, the Indian banking industry has been experiencing an unprecedented level of consolidation through mergers and acquisitions among large financial institutions at notable levels. It may also be noted that though bank mergers were common phenomenon in developed countries, they have become a phenomenon comparatively at remarkable level after economic liberalization in India.

To a large extent, this consolidation is based on a belief that gains can accrue through expense reduction, increased market power, reduced earnings volatility, and scale and scope economies. If consolidation does, in fact, lead to value gains, then shareholder wealth can be increased. On the other hand, if consolidating entities does not lead to the promised positive effects, then mergers may lead to a less profitable and valuable banking industry. Many researchers worldwide have empirically found that shareholders' wealth of the acquiring banks has decreased while it has been vice versa in the case of acquired firms.

An attempt has been made in this chapter to ascertain their effect or M&A in banking industry in shareholder wealth. For the present study, 8 merging and acquisition events in banking industry after economic liberalization have been examined in this event study analysis. The effect of merger and acquisition of these banks on their shareholders' wealth have been empirically analyzed based on Abnormal Return (AR) and Cumulative Abnormal Returns (CAR) arrived at using Market Model (MM) and Market Adjusted Model (MAM). The results of the analysis are tabulated and discussed in the following section of this chapter.

1. **Bank of Baroda (BOB) acquiring Barelly Corporation Bank Ltd**

Table 5.1 presents the Abnormal Returns (ARs) and Cumulative Abnormal Returns (CARs) based on market model for 31 days even period for Bank of Baroda (BOB) acquiring Barelly Corporation Bank Ltd. The use of market model, also called risk adjusted model, is based on the assumption that the firm / bank is expected to generate the same return as a portfolio of stocks used to represent the overall market. That is, market model is used to get the AR after controlling the effect of market-wide fluctuations.

From the table, the AR on -14 (AR = 0.0650, t = 2.48, $p < 0.05$) , -13 (AR = 0.0929, t = 3.54, $p < 0.01$), -12 (AR = 0.0696, t = 2.66, $p < 0.01$) and -11 (AR = 0.0722, t = 2.76, $p < 0.01$) days before the official announcements of M & A is positive and significant at required hypothetical level. However, the AR had declined to negative level at 0.0509, which is also significant statistically ($p < 0.10$), on 9th day before announcement.

The above table shows that the leakage of information about the acquisition activity of BOB was considered as favourable information initially . But favourable reactions of the investors did not sustain for long.

On the official announcement day (t=0) as well as on day 1, the AR is negative revealing the selling pressure (AR is negative), but there has not significant reduction in the asset value of BOB on these two days. In the post announcement period, the AR is found to be positive and significant at 1 per cent and 5 per cent levels on +2 and +3 event days respectively. Similar positive significant AR is also observed on 12th and 13th days after official announcement. Significantly, during 31days event window, the AR is negative for only few days.

Further, the CAR values are significantly high at 1 per cent level for 30 days out of 31days event window (-15 and +15). The CAR, which is almost ‘Zero’ on -15 (15 days before announcement), is statistically significant at 45.32 per cent on +15 (15 days after announcement). This means, during event periods, the shareholders wealth has increased by 45.32 per cent. From the above, it is certain that market has anticipated and welcomed the acquisition activity of BOB, in turn resulting in increased wealth to the shareholders.

Table 5.1
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for Bank Of Baroda acquiring Barelly Corporation Bank Ltd

Day Relative to Announcement	Abnormal Return	‘t’ Value (Abnormal Return)	Cumulative Abnormal Return	‘t’ Value (Cumulative Abnormal Return)
-15	0.0092	0.35	0.0092	0.35
-14	0.0650**	2.48	0.0742***	2.83
-13	0.0929***	3.54	0.1671***	6.38
-12	0.0696***	2.66	0.2367***	9.03
-11	0.0722***	2.76	0.3089***	11.79
-10	-0.0157	-0.60	0.2932***	11.19
-9	-0.0509*	-1.94	0.2423***	9.25
-8	-0.0033	-0.13	0.2390***	9.12
-7	0.0199	0.76	0.2589***	9.88
-6	-0.0205	-0.78	0.2384***	9.10
-5	-0.0080	-0.31	0.2304***	8.79
-4	0.0100	0.38	0.2404***	9.17
-3	0.0244	0.93	0.2648***	10.10
-2	0.0190	0.73	0.2838***	10.83
-1	0.0036	0.14	0.2874***	10.97
0	-0.0097	-0.37	0.2777***	10.60
1	-0.0010	-0.04	0.2767***	10.56
2	0.0814***	3.11	0.3581***	13.66
3	0.0616**	2.35	0.4197***	16.02
4	-0.0095	-0.36	0.4102***	15.65
5	-0.0339	-1.29	0.3763***	14.36
6	0.0195	0.74	0.3958***	15.10
7	-0.0259	-0.99	0.3699***	14.11
8	0.0001	0.00	0.3700***	14.12
9	0.0007	0.03	0.3707***	14.15
10	-0.0410	-1.56	0.3297***	12.58
11	-0.0360	-1.37	0.2937***	11.21
12	0.0543**	2.07	0.3480***	13.28
13	0.0703***	2.68	0.4183***	15.96
14	0.0030	0.11	0.4213***	16.08
15	0.0319	1.22	0.4532***	17.29

Source: Computed on the basis of CMIE Data Source
***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Table 5.2
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for Bank Of Baroda acquiring Barelly Corporation Bank Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	0.0111	0.42	0.0111	0.42
-14	0.0640**	2.43	0.0751***	2.85
-13	0.0884***	3.35	0.1635***	6.20
-12	0.0681**	2.58	0.2316***	8.78
-11	0.0704***	2.67	0.3020***	11.44
-10	-0.0205	-0.78	0.2815***	10.67
-9	-0.0564**	-2.14	0.2251***	8.53
-8	-0.0060	-0.23	0.2191***	8.30
-7	0.0179	0.68	0.2370***	8.98
-6	-0.0268	-1.02	0.2102***	7.97
-5	-0.0153	-0.58	0.1949***	7.39
-4	0.0035	0.13	0.1984***	7.52
-3	0.0286	1.08	0.2270***	8.60
-2	0.0139	0.53	0.2409***	9.13
-1	0.0013	0.05	0.2422***	9.18
0	-0.0114	-0.43	0.2308***	8.75
1	-0.0018	-0.07	0.2290***	8.68
2	0.0779***	2.95	0.3069***	11.63
3	0.0596**	2.26	0.3665***	13.89
4	-0.0136	-0.52	0.3529***	13.37
5	-0.0366	-1.39	0.3163***	11.99
6	0.0131	0.50	0.3294***	12.48
7	-0.0298	-1.13	0.2996***	11.35
8	-0.0049	-0.19	0.2947***	11.17
9	0.0021	0.08	0.2968***	11.25
10	-0.0404	-1.53	0.2564***	9.72
11	-0.0398	-1.51	0.2166***	8.21
12	0.0546**	2.07	0.2712***	10.28
13	0.0686***	2.60	0.3398***	12.88
14	-0.0036	-0.14	0.3362***	12.74
15	0.0274	1.04	0.3636***	13.78

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level

Figure 5.1: CAR for Bank of Baroda's Acquistion of Barelly Corporation Bank Ltd

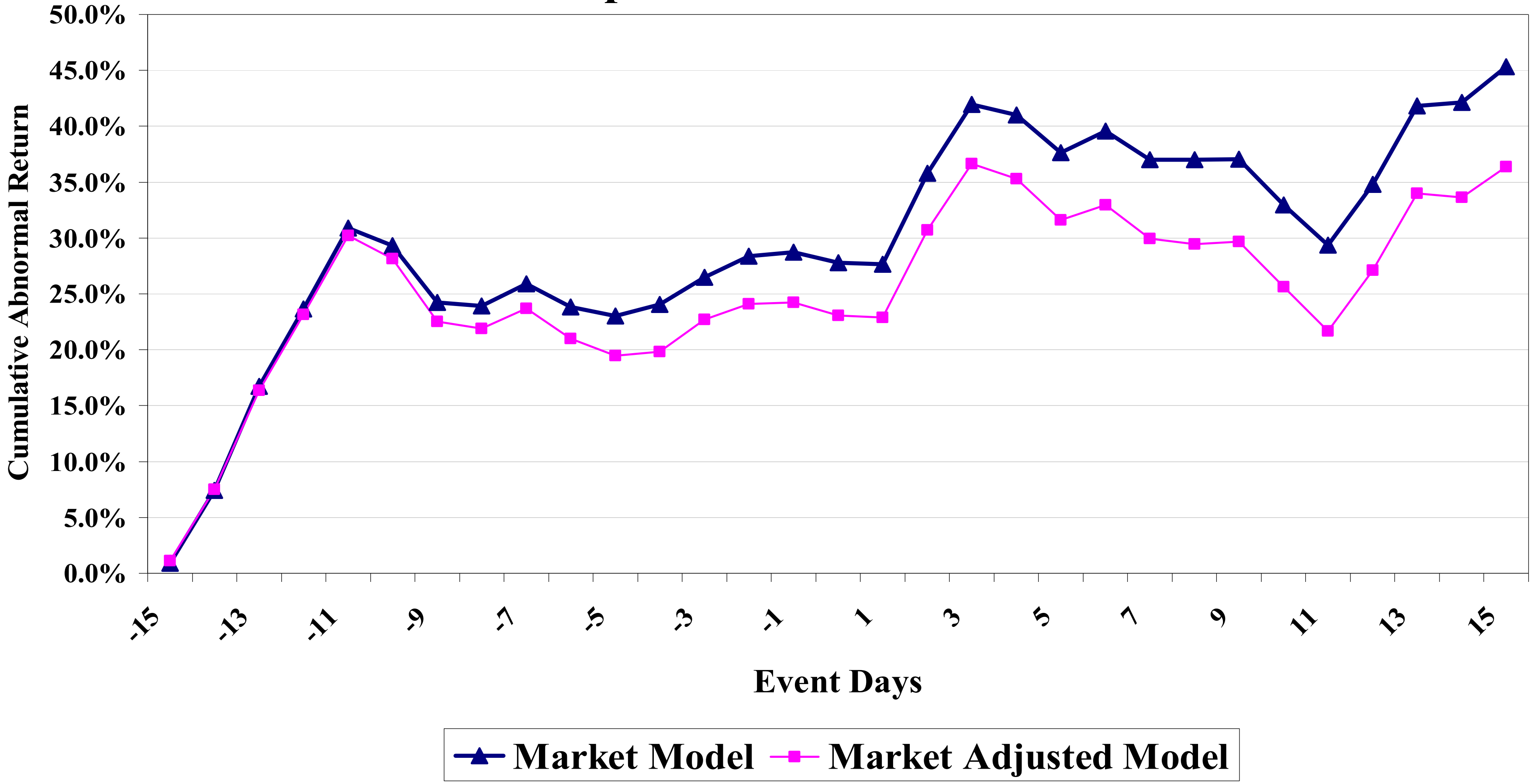


Table 5.2, presents the AR and CAR values for event periods from -15 to +15 based on Market Adjusted Model for BOB acquiring Barelly Corporation Bank Ltd. The Market Adjusted Model (MAM) assumes that ex-ante expected returns are the same for all firms and in any period and equal to the expected return of the market index.

It is also assumed that unsystematic risk is nil (Standard deviation = 0) and systematic risk, meaning, market risk has been the same for all firms during normal period (Market beta = 1). The assumption of MAM is that the firm / bank is expected to generate the same return as the rest of the market.

From the observation of the table, it is observed that the increase / decrease as well as statistical significance for AR has been very similar to that of AR based on market model. The status of CAR values based on Market adjusted model also is very similar to that of market model. However CAR based on MAM for event window -15 to +15 are at 36.36 per cent, which is less than that of market model. This shows that an increase in the shareholders' wealth of BOB is more relative to portfolio risk compared to entire market.

2. Bank of Baroda (BOB) acquiring Banaras State Bank Ltd.

Table 5.3 presents the daily abnormal returns and cumulative abnormal returns for 31 days event period (15 days before and 15 days after the official announcement of acquisition) against acquisition of Banaras State Bank Ltd by BOB. It can be seen from the table that the AR is negative for 18 out of 31 event days (including announcement day). The AR is negative for 8 days before and 9 days after the announcement. The negative AR is statistically significant on days -14, -4 and +11 in the event window.

Moreover, the AR is negative and significant at 1 per cent level on Day 0, on the of official announcement of acquisition of Banaras State Bank Ltd by BOB. This shows that market did not anticipate the BOB acquiring Banaras State Bank Ltd and reacted negatively to it. Further, negative significant AR on event day indicates that the panic among investors resulting in the sale of shares as they expected the decline in the shareholders' wealth due to acquisition.

Table 5.3
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for Bank Of Baroda acquiring Banaras State Bank Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	0.0162	0.79	0.0162	0.79
-14	-0.0615***	-3.01	-0.0453**	-2.22
-13	-0.0281	-1.38	-0.0734***	-3.59
-12	-0.0146	-0.71	-0.0880***	-4.31
-11	-0.0206	-1.01	-0.1086***	-5.32
-10	0.0045	0.22	-0.1041***	-5.10
-9	0.0101	0.49	-0.0940***	-4.60
-8	0.0037	0.18	-0.0903***	-4.42
-7	-0.0029	-0.14	-0.0932***	-4.56
-6	-0.0127	-0.62	-0.1059***	-5.19
-5	-0.0250	-1.22	-0.1309***	-6.41
-4	-0.0456**	-2.23	-0.1765***	-8.64
-3	0.0115	0.56	-0.1650***	-8.08
-2	0.0009	0.04	-0.1641***	-8.03
-1	0.0056	0.27	-0.1585***	-7.76
0	-0.0573***	-2.81	-0.2158***	-10.57
1	0.0335	1.64	-0.1823***	-8.93
2	-0.0043	-0.21	-0.1866***	-9.14
3	0.0025	0.12	-0.1841***	-9.01
4	-0.0093	-0.46	-0.1934***	-9.47
5	-0.0206	-1.01	-0.2140***	-10.48
6	-0.0043	-0.21	-0.2183***	-10.69
7	-0.0057	-0.28	-0.2240***	-10.97
8	0.0123	0.60	-0.2117***	-10.37
9	-0.0170	-0.83	-0.2287***	-11.20
10	0.0277	1.36	-0.2010***	-9.84
11	-0.0446**	-2.18	-0.2456***	-12.03
12	-0.0019	-0.09	-0.2475***	-12.12
13	-0.0094	-0.46	-0.2569***	-12.58
14	0.0087	0.43	-0.2482***	-12.15
15	0.0019	0.09	-0.2463***	-12.06

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level

From the table, it is observed that CAR values are negative and significant at higher conventional level on all days except day -15 in the event window. The CAR, with positive value of 0.0161 on day -15 has become -0.2158 on event day (t = 0) and -0.2463 after 15 days after the official announcement. Therefore, it is inferred that shareholders wealth of BOB experienced remarkable destruction due to negative reaction of the market for BOB acquiring Banaras State Bank Ltd.

Table 5.4 presents the Abnormal returns and Cumulative abnormal returns for event period based market adjusted model for BOB's acquisition activity involving Banaras State Bank Ltd. The AR for shareholders of BOB relative to overall market with similar risk for all scripts listed, is found to be negative for 8 days before announcement and 6 days after official announcement of acquisition. The negative AR is significant on days -14 ($p < 0.01$) and -4 ($p < 0.10$) as well as on day 0 ($p <0.05$), an event day. During post-announcement period, the negative AR is significant on only one day, i.e., on day -11 ($p < 0.05$).

It is interesting to note that AR is positive and significant on very next day of the official announcement relative market return with similar risk (beta = 1) for all scripts. Further, CAR values are also negative and significant at required conventional level for all event days except day -15, and less than the CARs based on MM. From the table, it is inferred that the market reacted negatively and resulted in the destruction of the shareholders' wealth against BOB's acquisition of Banaras State Bank Ltd. It is also noted that the destruction of wealth is higher relative to market risk.

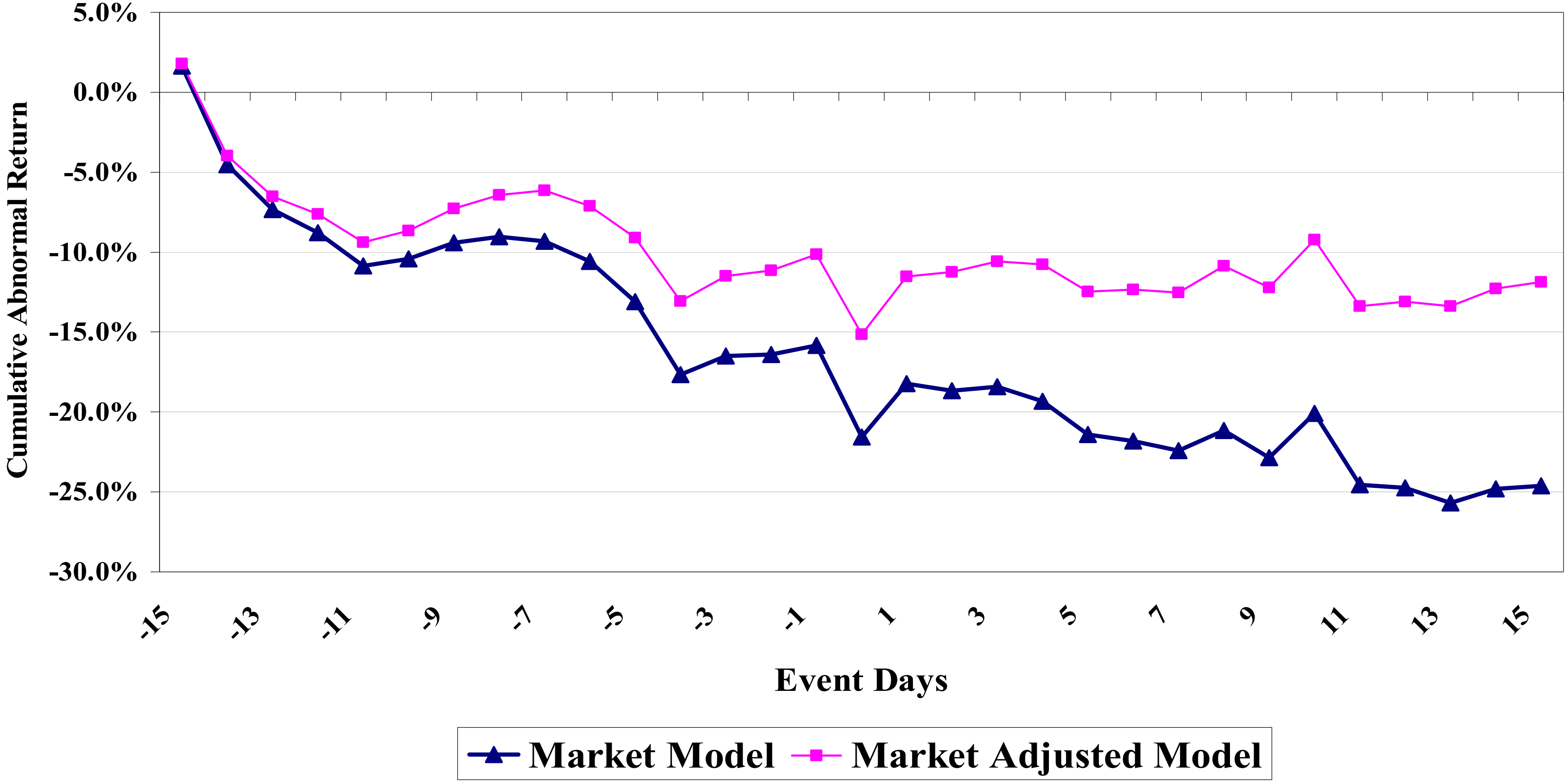
Table 5.4
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for Bank Of Baroda acquiring Banaras State Bank Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	0.0179	0.87	0.0179	0.87
-14	-0.0576***	-2.81	-0.0397*	-1.94
-13	-0.0255	-1.24	-0.0652***	-3.18
-12	-0.0111	-0.54	-0.0763***	-3.72
-11	-0.0175	-0.85	-0.0938***	-4.57
-10	0.0071	0.35	-0.0867***	-4.23
-9	0.0139	0.68	-0.0728***	-3.55
-8	0.0086	0.42	-0.0642***	-3.13
-7	0.0027	0.13	-0.0615***	-3.00
-6	-0.0096	-0.47	-0.0711***	-3.47
-5	-0.0200	-0.98	-0.0911***	-4.44
-4	-0.0396*	-1.93	-0.1307***	-6.37
-3	0.0158	0.77	-0.1149***	-5.60
-2	0.0033	0.16	-0.1116***	-5.44
-1	0.0101	0.49	-0.1015***	-4.95
0	-0.0499**	-2.43	-0.1514***	-7.38
1	0.0361*	1.76	-0.1153***	-5.62
2	0.0028	0.14	-0.1125***	-5.49
3	0.0068	0.33	-0.1057***	-5.15
4	-0.0021	-0.10	-0.1078***	-5.26
5	-0.0170	-0.83	-0.1248***	-6.09
6	0.0014	0.07	-0.1234***	-6.02
7	-0.0018	-0.09	-0.1252***	-6.11
8	0.0166	0.81	-0.1086***	-5.30
9	-0.0137	-0.67	-0.1223***	-5.96
10	0.0301	1.47	-0.0922***	-4.50
11	-0.0415**	-2.02	-0.1337***	-6.52
12	0.0026	0.13	-0.1311***	-6.39
13	-0.0027	-0.13	-0.1338***	-6.53
14	0.0111	0.54	-0.1227***	-5.98
15	0.0041	0.20	-0.1186***	-5.78

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Figure 5.2: CAR for Bank of Baroda's Acquistion of Banaras State Bank Ltd



3. Oriental Bank of Commerce's acquiring Punjab Cooperative and Bari Doab Bank Ltd.

Table 5.5 exhibits the abnormal returns and cumulative abnormal returns for days -15 to +15 surrounding the official announcement of Oriental Bank of Commerce's acquisition of Punjab Cooperative and Bari Doab Bank Ltd. An examination of the table showed that AR is negative for 16 out of 31 days event window. However, none of the AR, either positive or negative is found to be statistically significant at required conventional level. At the same time, the AR on days -1 and 0 was positive. From the insignificant AR values as well as from positive AR values, though insignificant, on days -1 and 0, it is apparent that the market did not give much important to the leakage of acquisition information and exhibited no reaction to it.

The Cumulative abnormal returns (CARs) is not significant for most of the even window period. But CAR values began to rise significantly at 5th, 6th and 7th day after the official announcement. That is, for 21 days (-15, + 5), 22 days (-15, +6) and 23 days (-15, +7) event windows the CAR values, 4.50 per cent, 6.55 per cent and 4.11 per cent is significant at 5 per cent, 1 per cent and 5 per cent respectively. Though, insignificant, both AR and CAR are positive on even day (day 0). The above picture indicates that the market would have considered the acquisition activity as favourable one and reacted accordingly. But the above positive reactions of the market did not sustain for long and the CARs has declined from day +8 of the event window and stood at '0' on day +15. That is, CAR for event window (-15, +15) was 'zero', in turn indicating that there was neither destruction nor creation of wealth for shareholders' of Oriental Bank of Commerce pertaining to acquisition of Punjab Cooperative and Bari Doab Bank Ltd. Hence, it is noted that the wealth of shareholders' of Oriental bank of commerce remain unchanged as market did not give any importance to acquisition activities of the bank.

Table 5.5
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for Oriental Bank of Commerce acquiring Punjab Coop. and Bari Doab Bank Ltd

Day Relative to Announcement	Abnormal Return	‘t’ Value (Abnormal Return)	Cumulative Abnormal Return	‘t’ Value (Cumulative Abnormal Return)
-15	0.0025	0.12	0.0025	0.12
-14	-0.0047	-0.23	-0.0022	-0.11
-13	0.0051	0.25	0.0029	0.14
-12	0.0087	0.42	0.0116	0.56
-11	0.0182	0.88	0.0298	1.45
-10	-0.0028	-0.14	0.0270	1.31
-9	-0.0025	-0.12	0.0245	1.19
-8	0.0070	0.34	0.0315	1.53
-7	-0.0040	-0.19	0.0275	1.34
-6	-0.0063	-0.31	0.0212	1.03
-5	-0.0054	-0.26	0.0158	0.77
-4	0.0097	0.47	0.0255	1.24
-3	-0.0229	-1.11	0.0026	0.13
-2	0.0003	0.01	0.0029	0.14
-1	0.0103	0.50	0.0132	0.64
0	0.0217	1.05	0.0349	1.70
1	-0.0103	-0.50	0.0246	1.20
2	-0.0235	-1.14	0.0011	0.05
3	0.0002	0.01	0.0013	0.06
4	0.0193	0.94	0.0206	1.00
5	0.0244	1.19	0.0450**	2.19
6	0.0205	1.00	0.0655***	3.18
7	-0.0244	-1.19	0.0411**	2.00
8	-0.0070	-0.34	0.0341	1.66
9	-0.0053	-0.26	0.0288	1.40
10	-0.0145	-0.70	0.0143	0.70
11	0.0177	0.86	0.0320	1.56
12	-0.0137	-0.67	0.0183	0.89
13	0.0085	0.41	0.0268	1.30
14	-0.0074	-0.36	0.0194	0.94
15	-0.0194	-0.94	0.0000	0.00

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level

In Table 5.6. portrays the abnormal returns and cumulative abnormal returns using market adjusted model for acquisition of Punjab Cooperative and Bari Doab Bank Ltd by Oriental bank of commerce. From the table 5.6, it is seen that the AR and CARs, calculated with the assumption of market risk same for all the scripts, are similar to that of market model.

In terms of market adjusted model, the CAR value is significant only on day +6 of event period. During 31 days event period [15 days before and 15 days after the acquisition event], the market is found to be reluctant towards acquisition activities of Oriental Bank of Commerce and destruction in share holders' value during event period is not at mentionable level.

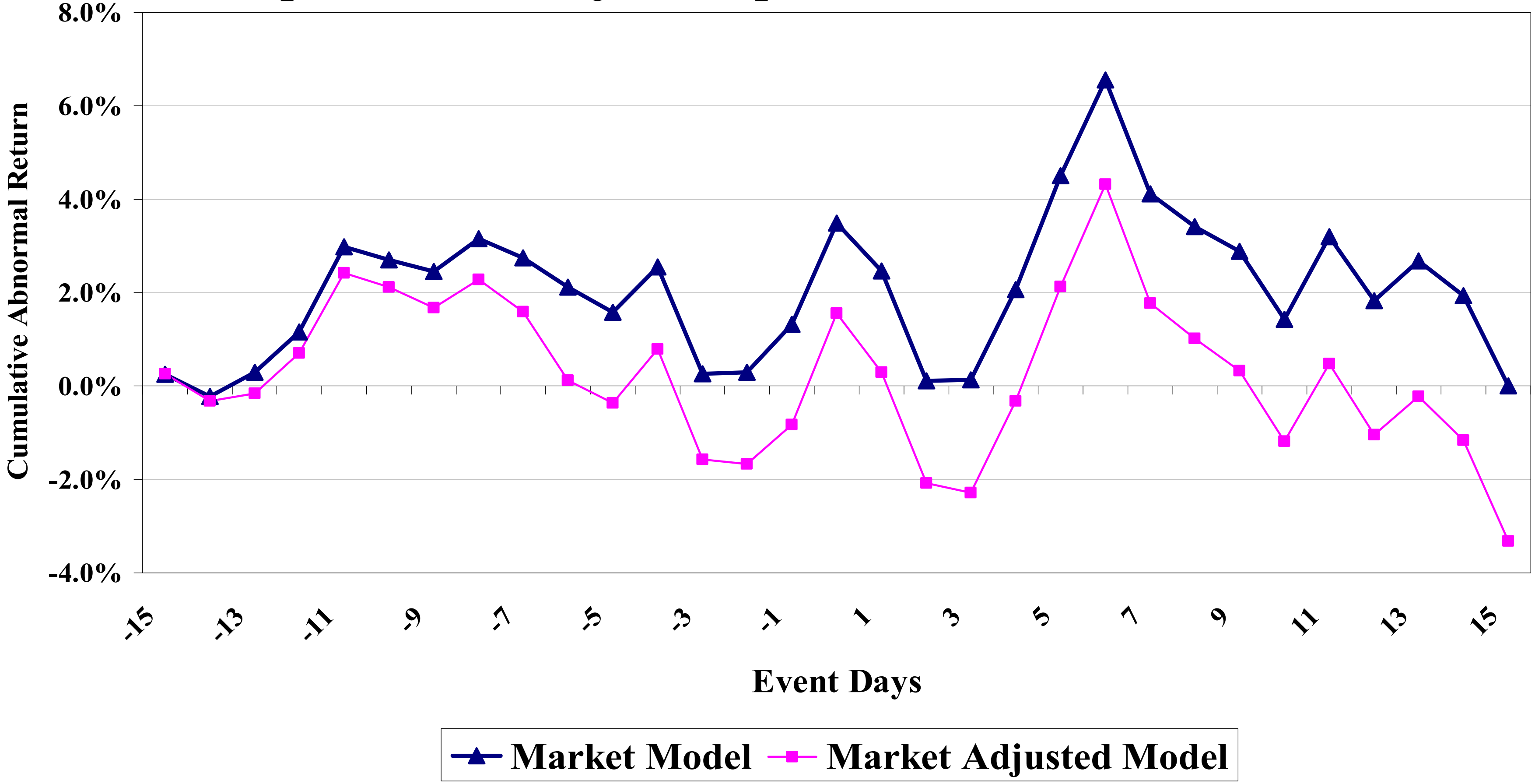
Table 5.6
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for Oriental Bank of Commerce acquiring Punjab Coop. and Bari Doab Bank Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	0.0026	0.13	0.0026	0.13
-14	-0.0058	-0.28	-0.0032	-0.16
-13	0.0016	0.08	-0.0016	-0.08
-12	0.0087	0.42	0.0071	0.34
-11	0.0171	0.83	0.0242	1.17
-10	-0.0030	-0.15	0.0212	1.03
-9	-0.0044	-0.21	0.0168	0.81
-8	0.0060	0.29	0.0228	1.10
-7	-0.0069	-0.33	0.0159	0.77
-6	-0.0147	-0.71	0.0012	0.06
-5	-0.0048	-0.23	-0.0036	-0.17
-4	0.0115	0.56	0.0079	0.38
-3	-0.0236	-1.14	-0.0157	-0.76
-2	-0.0010	-0.05	-0.0167	-0.81
-1	0.0084	0.41	-0.0083	-0.40
0	0.0239	1.16	0.0156	0.76
1	-0.0127	-0.62	0.0029	0.14
2	-0.0237	-1.15	-0.0208	-1.01
3	-0.0020	-0.10	-0.0228	-1.10
4	0.0196	0.95	-0.0032	-0.16
5	0.0245	1.19	0.0213	1.03
6	0.0219	1.06	0.0432**	2.09
7	-0.0255	-1.24	0.0177	0.86
8	-0.0075	-0.36	0.0102	0.49
9	-0.0069	-0.33	0.0033	0.16
10	-0.0151	-0.73	-0.0118	-0.57
11	0.0166	0.80	0.0048	0.23
12	-0.0152	-0.74	-0.0104	-0.50
13	0.0082	0.40	-0.0022	-0.11
14	-0.0094	-0.46	-0.0116	-0.56
15	-0.0216	-1.05	-0.0332	-1.61

Source: Computed on the basis of CMIE Data Source

**Significant at 5% level

Figure 5.3: CAR for Oriental Bank of Commerce's Acquistion of Punjab Coop.and Bari Doab Bank Ltd



4. Oriental Bank of Commerce (OBC) acquiring Global Trust Bank Ltd

Pertaining to effect of acquisition of Global Trust Bank Ltd by Oriental Bank of Commerce (OBC), the results of market model were shown in Table 5.7. From the observation of the table, one can understand that the market had reacted negatively to the leakage of information about acquisition activity of OBC from 15 to 11 days before the official announcement as AR and CAR values were negative. Particularly, CAR values, which are negative, on day -12, -11, -10, and -9 before announcement is significant statistically.

On day 0, the day of the event, though insignificant, AR and CAR are negative, revealing negative reaction of the market. However, insignificant AR and CAR values on day 0 observed that market had restrained from over-reacting against acquisition on the day of official announcement. But on the very next day of the official announcement (day +1), the AR became negative and significant at 5 per cent level. The CAR is also significant and negative on day +1 and there had been continuous decline in CAR up to day +11, before stood at range bound between -0.1933 and -0.1843 from day +12 to day +15.

Moreover, the CAR values from day +1 to day +15 during post-announcement period are significant at 1 per cent level. This shows that there has been delay in the reaction of market to the acquisition of Global Trust Bank by OBC. Also, only after official announcement, there has been a significant negative investors' reactions to the acquisition event in OBC. On the whole, it is observed that there has been a remarkable reduction in the shareholders' wealth of OBC relative to its acquisition of Global Trust Bank.

Table 5.7
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for Oriental Bank of Commerce acquiring Global Trust Bank Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	-0.0204	-0.72	-0.0204	-0.72
-14	-0.0109	-0.39	-0.0313	-1.11
-13	-0.0182	-0.65	-0.0495	-1.76
-12	-0.0214	-0.76	-0.0709**	-2.52
-11	-0.0555	-1.97	-0.1264***	-4.49
-10	0.0419	1.49	-0.0845***	-3.00
-9	0.0298	1.06	-0.0547*	-1.94
-8	0.0250	0.89	-0.0297	-1.05
-7	-0.0123	-0.44	-0.0420	-1.49
-6	0.0037	0.13	-0.0383	-1.36
-5	0.0007	0.02	-0.0376	-1.34
-4	0.0238	0.85	-0.0138	-0.49
-3	0.0045	0.16	-0.0093	-0.33
-2	-0.0068	-0.24	-0.0161	-0.57
-1	-0.0167	-0.59	-0.0328	-1.16
0	-0.0023	-0.08	-0.0351	-1.25
1	-0.0614**	-2.18	-0.0965***	-3.43
2	-0.0187	-0.66	-0.1152***	-4.09
3	-0.0232	-0.82	-0.1384***	-4.91
4	-0.0303	-1.08	-0.1687***	-5.99
5	-0.0144	-0.51	-0.1831***	-6.50
6	-0.0094	-0.33	-0.1925***	-6.84
7	0.0011	0.04	-0.1914***	-6.80
8	-0.0043	-0.15	-0.1957***	-6.95
9	0.0132	0.47	-0.1825***	-6.48
10	-0.0104	-0.37	-0.1929***	-6.85
11	-0.0114	-0.40	-0.2043***	-7.25
12	0.0110	0.39	-0.1933***	-6.86
13	0.0039	0.14	-0.1894***	-6.73
14	-0.0002	-0.01	-0.1896***	-6.73
15	0.0053	0.19	-0.1843***	-6.54

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Table 5.8 represents the market adjusted Abnormal returns and Cumulative abnormal return for acquisition of Global Trust Bank by OBC. From the table, it is understood that the market adjusted AR and CAR values were almost very similar to risk adjusted AR and CAR values for 31 days event window. One of the important exceptions is that the risk adjusted AR and CAR values on Day 0 are negative and significant, whereas market adjusted AR and CAR values on the day of the event (day 0) is negative but not significant statistically. Similarly, the market adjusted CAR values are found to be significant from day +3 to day +15, whereas in the case of risk adjusted CARs, they are significant from event day itself. Any how, based on both market model and market adjusted model, the shareholders' wealth of OBC during post-announcement period has declined remarkably. From the above, it is inferred that the market has not considered the pre-acquisition activity of OBC as important as it viewed it during the post-announcement period, because the CAR values after official announcement of acquisition deals are strongly higher than the pre-announcement CARs.

It is therefore, concluded that market initially responded to the leakage of acquisition information but become reluctant and restrained from giving important to the acquisition of Global trust bank until it was officially announced. After official announcement, market then reacted negatively and resulted in the destruction of the wealth of shareholders' of OBC.

Table 5.8
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for Oriental Bank of Commerce acquiring Global Trust Bank Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	-0.0240	-0.70	-0.0240	-0.70
-14	0.0073	0.21	-0.0167	-0.48
-13	-0.0113	-0.33	-0.0280	-0.81
-12	-0.0412	-1.19	-0.0692**	-2.01
-11	-0.0340	-0.99	-0.1032***	-2.99
-10	0.0434	1.26	-0.0598*	-1.73
-9	0.0227	0.66	-0.0371	-1.08
-8	0.0169	0.49	-0.0202	-0.59
-7	-0.0028	-0.08	-0.0230	-0.67
-6	0.0175	0.51	-0.0055	-0.16
-5	0.0070	0.20	0.0015	0.04
-4	0.0221	0.64	0.0236	0.68
-3	0.0130	0.38	0.0366	1.06
-2	0.0063	0.18	0.0429	1.24
-1	-0.0115	-0.33	0.0314	0.91
0	0.0077	0.22	0.0391	1.13
1	-0.0675	-1.96	-0.0284	-0.82
2	-0.0181	-0.52	-0.0465	-1.35
3	-0.0122	-0.35	-0.0587*	-1.70
4	-0.0195	-0.57	-0.0782**	-2.27
5	-0.0069	-0.20	-0.0851**	-2.47
6	-0.0091	-0.26	-0.0942***	-2.73
7	-0.0018	-0.05	-0.0960***	-2.78
8	0.0128	0.37	-0.0832**	-2.41
9	0.0048	0.14	-0.0784**	-2.27
10	-0.0022	-0.06	-0.0806**	-2.34
11	-0.0063	-0.18	-0.0869**	-2.52
12	-0.0011	-0.03	-0.0880**	-2.55
13	-0.0010	-0.03	-0.0890**	-2.58
14	-0.0054	-0.16	-0.0944***	-2.74
15	0.0068	0.20	-0.0876**	-2.54

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

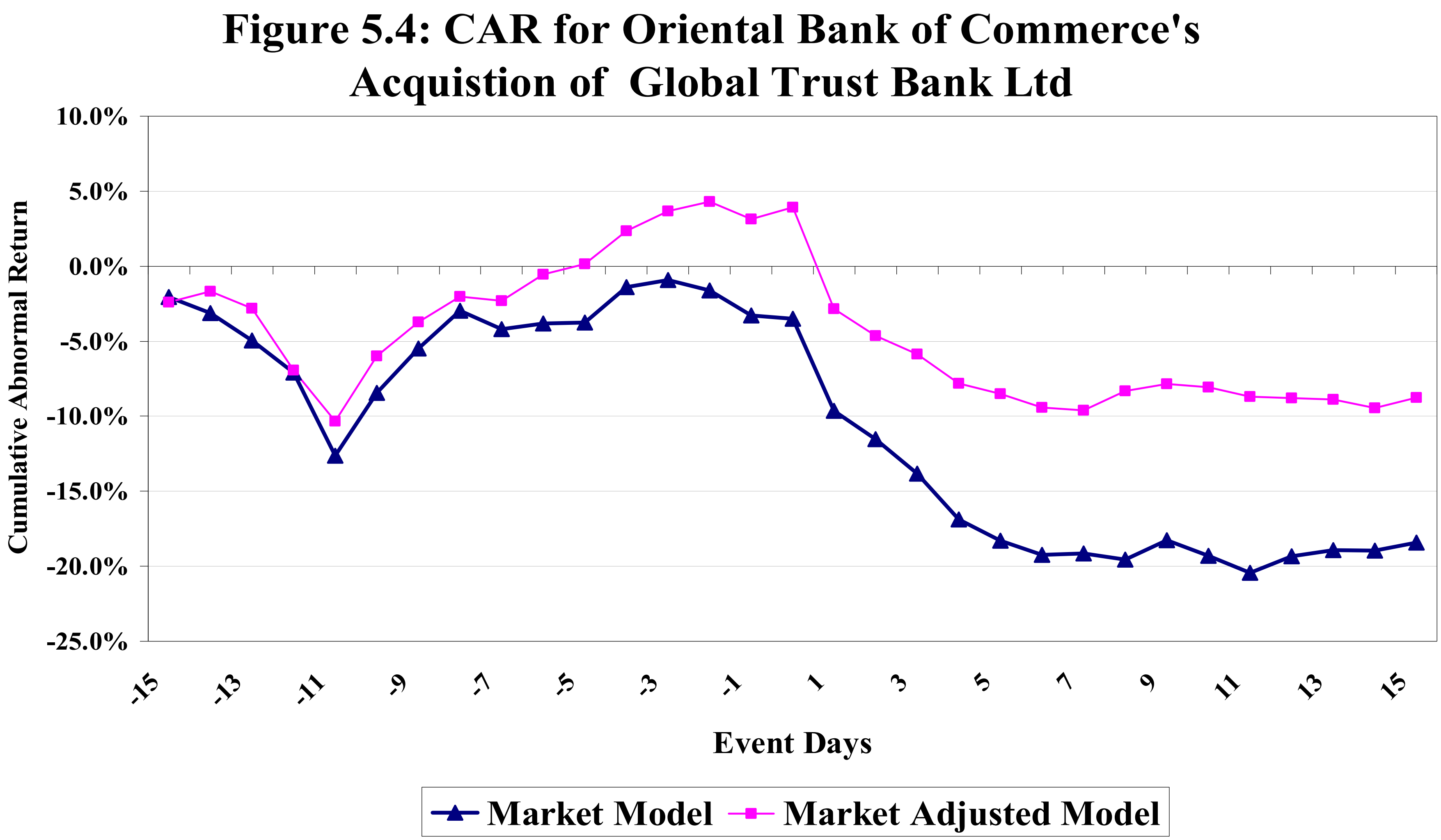


Figure 5.4: CAR for Oriental Bank of Commerce's Acquistion of Global Trust Bank Ltd
10.0%
5.0%
0.0%
-5.0%
-10.0%
-15.0%
-20.0%
-25.0%
Cumulative Abnormal Return
-15
-13
-11
-9
-7
-5
-3
-1
1
3
5
7
9
11
13
15
Event Days
Market Model
Market Adjusted Model

5. Punjab National bank acquiring Nedungadi Bank Ltd

The abnormal returns and cumulative abnormal returns during 31 days window for an event associated with acquisition of Nedungadi Bank Ltd by Punjab National bank are calculated using market model and the results of the same are shown in **Table 5.9**. It was found from the table that AR for all days in the event window was not significant at required conventional level. At the same time, the CAR value was positive and significant at 5 per cent level on day -9 (7.42%) before official announcement of acquisition deal. On day -7 before announcement also, the CAR (5.77%) is significant, but marginally. The significant AR on these two days during pre-announcement period have provided evidence for leakage of information and favourable reaction to it by the market.

Though insignificant, the AR is positive on event day (Day 0) and day after event day (Day +1) revealed substantial increase in wealth of shareholders surrounding the day of official announcement. However, CAR values for event windows [-15, -2], [-15, -1] and [-15, 0] before and up to official announcement are negative and significant at required hypothetical level and the CAR on day -1 is the highest of all (-12.11%). This reveals the destruction in shareholders' wealth against upcoming deals of Punjab National Bank acquiring Nedungadi Bank Ltd. Such unfavourable reaction of the market tend to prevail up to 9 days after announcement as the CAR values for event windows [-15, +5], [-15, +6], [-15, +7], [-15, +8] and [-15, +9], ranging between -6.31 per cent and -10.17 per cent are significant at required level of significant. The negative CAR of -6.49 per cent for 31 days event window [-15, +15] is significant at 10 per cent level. This again confirms the substantial decline in risk adjusted wealth of shareholders' of Punjab National Bank due to its activity involving acquisition of Nedungadi Bank Ltd.

Table 5.9
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for Punjab National Bank acquiring Nedungadi Bank Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	0.0260	0.77	0.0260	0.77
-14	-0.0303	-0.90	-0.0043	-0.13
-13	0.0325	0.97	0.0282	0.84
-12	-0.0083	-0.25	0.0199	0.59
-11	-0.0210	-0.62	-0.0011	-0.03
-10	0.0492	1.46	0.0481	1.43
-9	0.0261	0.78	0.0742**	2.21
-8	-0.0428	-1.27	0.0314	0.93
-7	0.0263	0.78	0.0577*	1.72
-6	-0.0559	-1.66	0.0018	0.05
-5	-0.0431	-1.28	-0.0413	-1.23
-4	-0.0016	-0.05	-0.0429	-1.28
-3	-0.0076	-0.23	-0.0505	-1.50
-2	-0.0281	-0.84	-0.0786**	-2.34
-1	-0.0425	-1.26	-0.1211***	-3.60
0	0.0433	1.29	-0.0778**	-2.31
1	0.0348	1.04	-0.0430	-1.28
2	-0.0100	-0.30	-0.0530	-1.58
3	0.0373	1.11	-0.0157	-0.47
4	-0.0190	-0.57	-0.0347	-1.03
5	-0.0342	-1.02	-0.0689**	-2.05
6	-0.0072	-0.21	-0.0761**	-2.26
7	-0.0034	-0.10	-0.0795**	-2.37
8	-0.0222	-0.66	-0.1017***	-3.03
9	0.0386	1.15	-0.0631*	-1.88
10	0.0283	0.84	-0.0348	-1.04
11	0.0370	1.10	0.0022	0.07
12	-0.0318	-0.95	-0.0296	-0.88
13	0.0096	0.29	-0.0200	-0.60
14	-0.0063	-0.19	-0.0263	-0.78
15	-0.0386	-1.15	-0.0649	-1.93

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Table 5.10 presents the abnormal and cumulative abnormal market adjusted daily returns for 31 days event window [+15, -15] pertaining to PNB's takeover of Nedungadi Bank Ltd. From table, it can be seen that the AR on day -10 (5.72%) is positive and significant at 10 per cent level. During pre-announcement period of 15 days, AR is positive for 7 days and negative for 8 days. This shows that market has anticipated the acquisition activities of PNB but it could not react strongly. Further, the AR on positive, though insignificant, on the day of official announcement (Day 0) as well as on day +1, the very next day of announcement. The table also indicated that the CAR values are positive significant for event days [-15, -10], [-15, -9], [-15, -8], [-15, -7], [-15, -6] in pre-announcement periods.

This indicates that market has anticipated the acquisition activity of the Punjab National Bank and reacted positively through increasing the value for shareholders. The CAR values are also positive and significant statistically for event windows from [-15, +1] to [+15, -15]. The CAR is at its highest level for 27 days event window from -15 to +11 (19.99%). At the end 31 days event period, the CAR is 16.24 per cent. The scenario of risk adjusted and marked adjusted CAR is graphically shown in Figure 5.5.

From the inferences of the market adjusted AR and CAR, it is found that the acquisition activity of Punjab National Bank has been anticipated by the market well. As a result, there has been destruction of wealth relative to market risk and an increase in shareholders' value relative to market return as well.

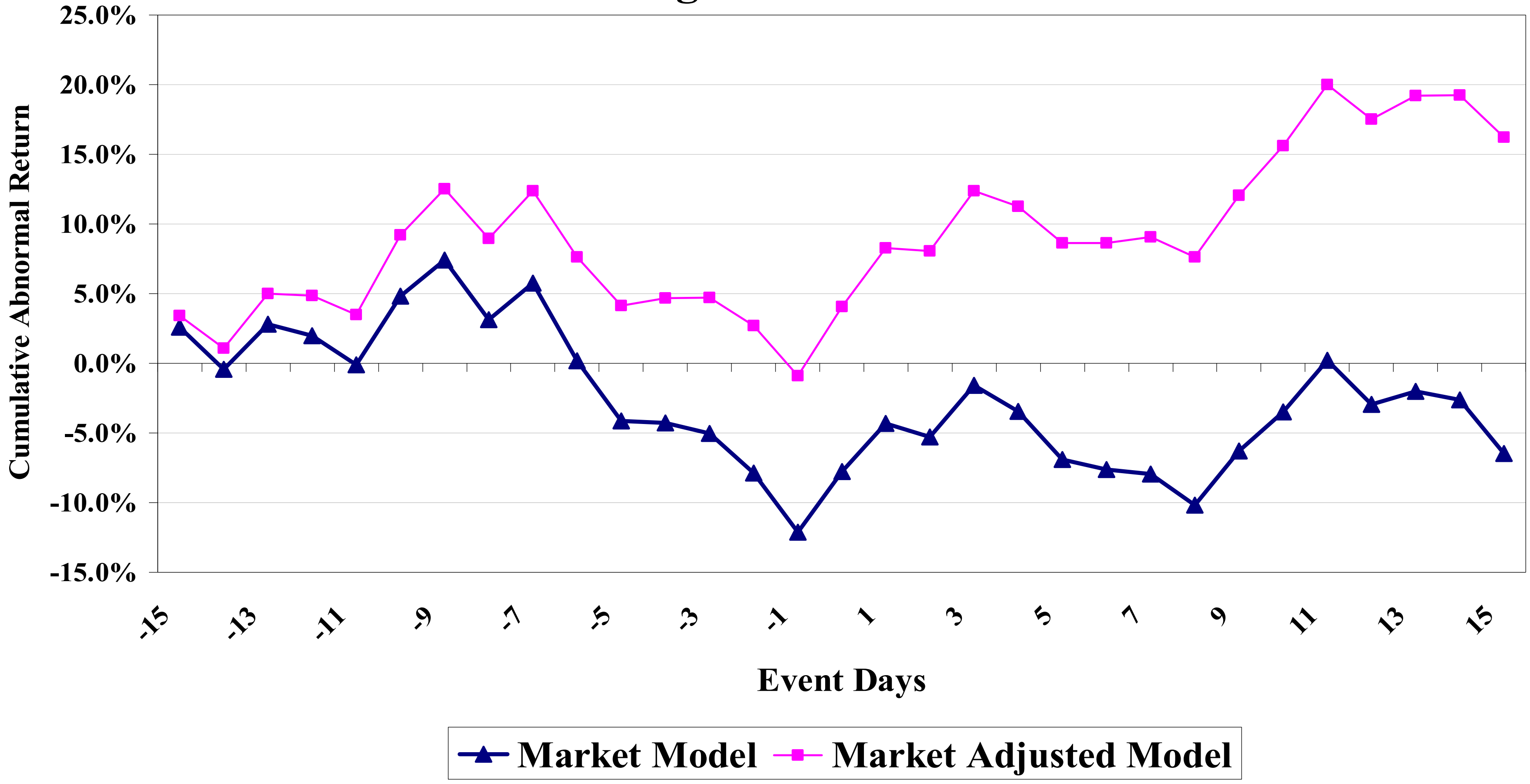
Table 5.10
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for Punjab National Bank acquiring Nedungadi Bank Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	0.0341	1.01	0.0341	1.01
-14	-0.0233	-0.69	0.0108	0.32
-13	0.0391	1.16	0.0499	1.48
-12	-0.0015	-0.04	0.0484	1.44
-11	-0.0136	-0.40	0.0348	1.04
-10	0.0572*	1.70	0.0920***	2.74
-9	0.0331	0.98	0.1251***	3.72
-8	-0.0357	-1.06	0.0894***	2.66
-7	0.0343	1.02	0.1237***	3.68
-6	-0.0475	-1.41	0.0762**	2.27
-5	-0.0347	-1.03	0.0415	1.23
-4	0.0051	0.15	0.0466	1.39
-3	0.0006	0.02	0.0472	1.40
-2	-0.0203	-0.60	0.0269	0.80
-1	-0.0360	-1.07	-0.0091	-0.27
0	0.0497	1.48	0.0406	1.21
1	0.0422	1.26	0.0828**	2.46
2	-0.0022	-0.07	0.0806**	2.40
3	0.0431	1.28	0.1237***	3.68
4	-0.0110	-0.33	0.1127***	3.35
5	-0.0263	-0.78	0.0864**	2.57
6	-0.0001	0.00	0.0863**	2.57
7	0.0043	0.13	0.0906***	2.69
8	-0.0142	-0.42	0.0764**	2.27
9	0.0442	1.31	0.1206***	3.59
10	0.0354	1.05	0.1560***	4.64
11	0.0439	1.31	0.1999***	5.95
12	-0.0246	-0.73	0.1753***	5.21
13	0.0167	0.50	0.1920***	5.71
14	0.0006	0.02	0.1926***	5.73
15	-0.0302	-0.90	0.1624***	4.83

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Figure 5.5: CAR for Punjab National Bank's Acquistion of Nedungadi Bank Ltd



6. State Bank of India's acquiring Kashinath Seth Bank.

Table 5.11 shows the results of shareholders' reaction to State Bank of India's takeover of Kashinath Seth Bank in terms of risk adjusted (market model based) Abnormal and Cumulative abnormal returns. It can be seen that the AR on Day -14 (5.80%) is positive and significant at 1 per cent level. Moreover, for 8 more event days in pre-announcement period, the AR is positive but insignificant. The positive significant AR on Day -14, and positive AR on most of the event days in pre-announcement period, have revealed that the market has anticipated the acquisition deals and reacted somewhat favourably to leakage of such information.

The significant AR of 3.10 per cent ($p < 0.05$) on official announcement day (event day) has further supported the favourable positive reaction of the market to State Bank of India's activity of acquiring the Kashinath Seth Bank.

The positive reaction to the event seems to be prevailing in the post-acquisition period also. Because AR is positive for 9 out of 15 days, and even it is significant at 10 per cent level on day +8 and day +15, though there has been insignificant decline in the share price on day +1 and +2. The CAR values for all event days except for day -15, are positive and significant. The CAR, which stood at 15.62 per cent for event time intervals from -15 to 0 (the day of the deal), has reached its all time high of 20.98 per cent for 31 days event window [-15, +15]. From the entire above scenario, it is apparent that there has been positive wealth effect for shareholders' of State Bank India from its acquisition deal with Kashinath Seth Bank.

Table 5.12 presents the market adjusted daily abnormal returns and cumulative abnormal returns for the event time intervals from -15 to +15 for takeover of Kashinath Seth Bank by State Bank of India. It is seen from table that status of AR and CAR based on Market adjusted model is very similar to that of Market (risk adjusted) model. The AR is positive and significant on day -14 (AR = 5.60%, $p < 0.01$), day 0 (AR = 3.23%, $p < 0.10$), day +8 ((AR = 3.14%, $p < 0.10$) and on day +15 (AR = 3.60%, $p < 0.10$). The Cumulative abnormal returns for all time intervals from [-15, -14] to [-15 to +15] are positive and significant at required level. The market adjusted CAR is as much as 20.35 per cent of wider event window [-15 to +15], which is also almost as same as risk adjusted CAR. The above picture is documented graphically using line chart in Figure 5.6.

Table 5.11
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for State Bank Of India acquiring Kashinath Seth Bank

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	-0.0023	-0.14	-0.0023	-0.14
-14	0.0580***	3.42	0.0557***	3.29
-13	-0.0222	-1.31	0.0335**	1.98
-12	0.0076	0.45	0.0411**	2.43
-11	-0.0045	-0.27	0.0366**	2.16
-10	0.0166	0.98	0.0532***	3.14
-9	0.0142	0.84	0.0674***	3.98
-8	0.0162	0.96	0.0836***	4.93
-7	-0.0108	-0.64	0.0728***	4.30
-6	0.0044	0.26	0.0772***	4.56
-5	0.0137	0.81	0.0909***	5.36
-4	0.0273	1.61	0.1182***	6.98
-3	-0.0131	-0.77	0.1051***	6.20
-2	-0.0033	-0.19	0.1018***	6.01
-1	0.0234	1.38	0.1252***	7.39
0	0.0310*	1.83	0.1562***	9.22
1	-0.0127	-0.75	0.1435***	8.47
2	-0.0230	-1.36	0.1205***	7.11
3	0.0115	0.68	0.1320***	7.79
4	-0.0039	-0.23	0.1281***	7.56
5	-0.0152	-0.90	0.1129***	6.66
6	0.0174	1.03	0.1303***	7.69
7	-0.0040	-0.24	0.1263***	7.45
8	0.0296*	1.75	0.1559***	9.20
9	0.0231	1.36	0.1790***	10.56
10	-0.0205	-1.21	0.1585***	9.35
11	0.0015	0.09	0.1600***	9.44
12	-0.0052	-0.31	0.1548***	9.13
13	0.0065	0.38	0.1613***	9.52
14	0.0186	1.10	0.1799***	10.62
15	0.0299*	1.76	0.2098***	12.38

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

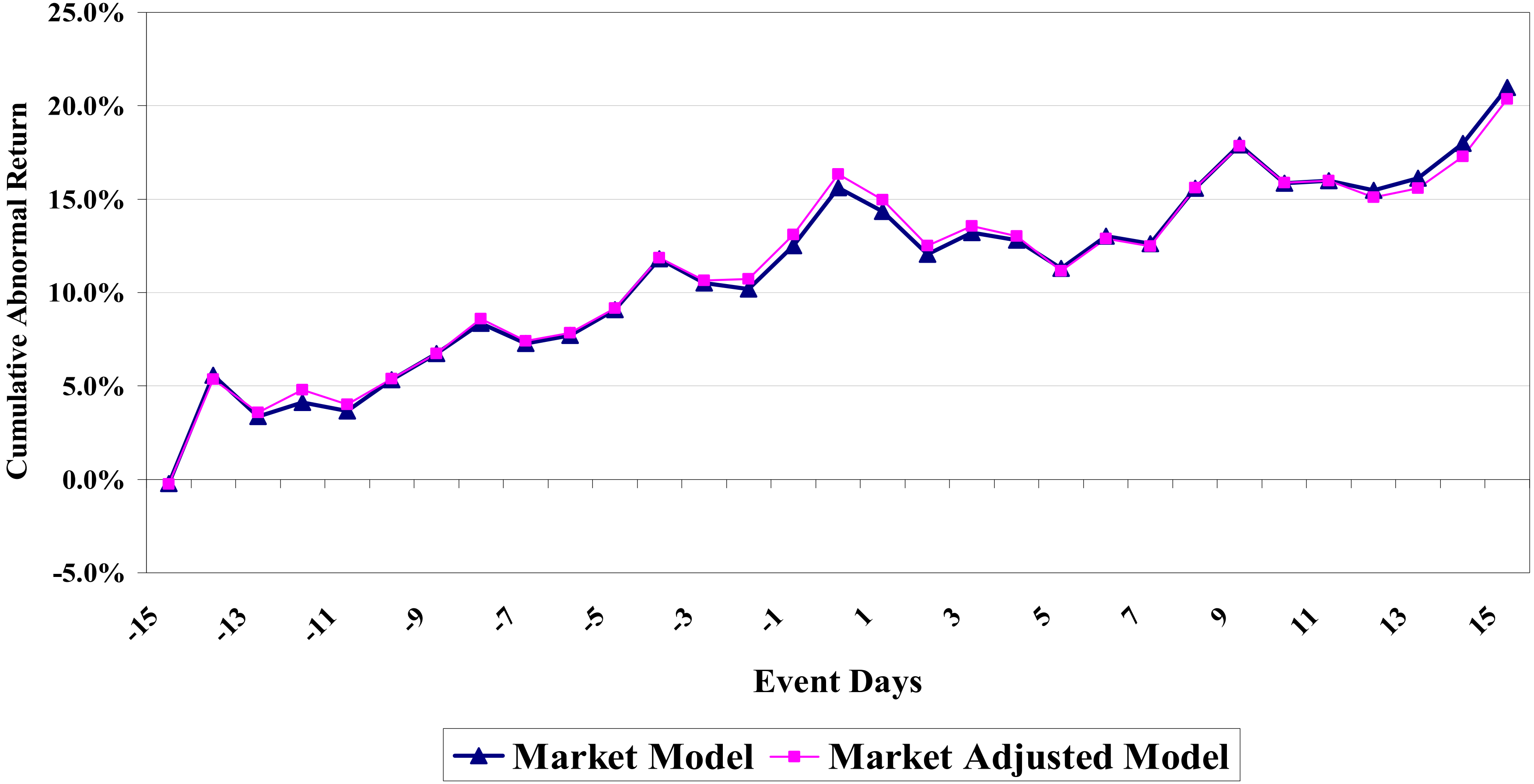
Table 5.12
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for State Bank Of India acquiring Kashinath Seth Bank

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	-0.0025	-0.15	-0.0025	-0.15
-14	0.0560***	3.25	0.0535***	3.10
-13	-0.0176	-1.02	0.0359**	2.08
-12	0.0120	0.70	0.0479***	2.78
-11	-0.0078	-0.45	0.0401**	2.33
-10	0.0138	0.80	0.0539***	3.13
-9	0.0135	0.78	0.0674***	3.91
-8	0.0186	1.08	0.0860***	4.99
-7	-0.0118	-0.68	0.0742***	4.31
-6	0.0041	0.24	0.0783***	4.54
-5	0.0134	0.78	0.0917***	5.32
-4	0.0270	1.57	0.1187***	6.89
-3	-0.0122	-0.71	0.1065***	6.18
-2	0.0008	0.05	0.1073***	6.23
-1	0.0238	1.38	0.1311***	7.61
0	0.0323*	1.87	0.1634***	9.48
1	-0.0138	-0.80	0.1496***	8.68
2	-0.0245	-1.42	0.1251***	7.26
3	0.0105	0.61	0.1356***	7.87
4	-0.0055	-0.32	0.1301***	7.55
5	-0.0184	-1.07	0.1117***	6.48
6	0.0173	1.00	0.1290***	7.49
7	-0.0042	-0.24	0.1248***	7.24
8	0.0314*	1.82	0.1562***	9.06
9	0.0223	1.29	0.1785***	10.36
10	-0.0196	-1.14	0.1589***	9.22
11	0.0010	0.06	0.1599***	9.28
12	-0.0089	-0.52	0.1510***	8.76
13	0.0049	0.28	0.1559***	9.05
14	0.0170	0.99	0.1729***	10.03
15	0.0306*	1.78	0.2035***	11.81

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Figure 5.6: CAR for State Bank of India's Acquistion of Kashinath Seth Bank Ltd



That is, irrespective of volatility in the market, the investors of State Bank of India considered the acquiring Kashinath Seth Bank as favourable and acted positively. This in turn has led the market to add additional wealth to the shareholders' of SBI.

7. Public sector banks

Table 5.13 reports risk adjusted (market model based) abnormal returns and cumulative abnormal returns for 31 days event periods for Public sector banks' acquisition activities. The table shows that AR is positive and significant on day -13 (AR = 0.0168, t = 1.82, $p < 0.10$), whereas it negative and significant on days -6 (AR = -0.0183, t = -1.98, $p < 0.05$) and -5 (AR = 0.0162, t = -1.75, $p < 0.10$) during pre-period. This shows that there has been information leakage and the market quickly assimilates the information into share prices.

On the day of press release, market has been silent and has not shown reaction to the acquisition deals. However, after 3 day of the announcement, market reacted positively and increased the market value of shares. The similar trend can also been on day +13. Between day +3 and day +13, there has been significant negative abnormal return on day +5 in post-event period. Also, the fluctuations in AR are balanced between positive and negative values through out the event days. From the insignificant AR values as well as from positive AR values, it is apparent that the market has seen the event as favourable by incorporating its reactions into share prices.

The Cumulative abnormal returns (CARs) are positive and significant for event windows from [-15, -12] to [-15, -6] in pre-event period. This has shown that market has anticipated the upcoming acquisition deals of the public sector banks and reacted favourably. However, on the day of event, the CAR is negative and insignificant. Moreover, in post-event period, the CAR is positive and significant at marginal level only for event window [-15, 3]. For four event windows in post-period, [-15, +8], [-15, +10], [-15, +11] and [-15, +12], the CAR values are negative and significant. The scenario implies that there has been negative reaction in the market after amalgamation activities of the public sector banks.

Table 5.13
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for Public Sector Banks' Acquisition Activities During Post Liberalisation Period

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	0.0067	0.72	0.0067	0.72
-14	-0.0085	-0.92	-0.0018	-0.19
-13	0.0168*	1.82	0.0151	1.63
-12	0.0068	0.74	0.0219**	2.36
-11	-0.0013	-0.14	0.0205**	2.22
-10	0.0154	1.67	0.0359***	3.89
-9	0.0025	0.27	0.0385***	4.16
-8	-0.0021	-0.23	0.0364***	3.94
-7	0.0054	0.58	0.0418***	4.52
-6	-0.0183*	-1.98	0.0234***	2.54
-5	-0.0162*	-1.75	0.0073	0.79
-4	-0.0007	-0.08	0.0065	0.71
-3	0.0020	0.21	0.0085	0.92
-2	-0.0029	-0.32	0.0056	0.60
-1	-0.0079	-0.86	-0.0024	-0.26
0	-0.0009	-0.09	-0.0032	-0.35
1	-0.0009	-0.10	-0.0041	-0.44
2	0.0050	0.54	0.0009	0.10
3	0.0157*	1.70	0.0166*	1.79
4	-0.0098	-1.06	0.0068	0.74
5	-0.0157*	-1.70	-0.0089	-0.97
6	0.0038	0.41	-0.0051	-0.55
7	-0.0117	-1.26	-0.0168	-1.82
8	-0.0042	-0.46	-0.0210**	-2.27
9	0.0060	0.65	-0.0150	-1.62
10	-0.0020	-0.21	-0.0169*	-1.83
11	-0.0075	-0.81	-0.0244***	-2.64
12	0.0036	0.39	-0.0208**	-2.25
13	0.0166*	1.79	-0.0042	-0.46
14	-0.0004	-0.05	-0.0047	-0.51
15	-0.0038	-0.41	-0.0085	-0.92

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Table 5.14 portrays the market adjusted AR and CARs for takeover bidding activities of public sector banks.

According to table, the AR is positive and significant only day +3 in post-period. In most of the event days, ARs, though insignificant, are positive. Further marked adjusted CAR is positive and significant at 1 per cent level for event windows from [-15, -13] to [-15, +15]. At the end of 31 days event period, the value to shareholders of public sector banks has increased by 8.17 per cent relative to return from market portfolio. The status of market model and market adjusted model based CAR is shown graphically using line chart in Figure 5.7. In sum, it is concluded that the market tend to show positive reaction to upcoming acquisition deals of the public sector banks and it has given return higher than return from market portfolio to the investors after amalgamation.

Table 5.14
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for Public Sector Banks' Acquisition Activities During Post Liberalisation Period

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	0.0065	0.64	0.0065	0.64
-14	0.0068	0.66	0.0133	1.30
-13	0.0125	1.21	0.0258**	2.51
-12	0.0058	0.57	0.0316***	3.08
-11	0.0024	0.24	0.0340***	3.32
-10	0.0163	1.59	0.0504***	4.91
-9	0.0037	0.36	0.0541***	5.28
-8	0.0014	0.14	0.0555***	5.41
-7	0.0056	0.54	0.0611***	5.96
-6	-0.0128	-1.25	0.0482***	4.70
-5	-0.0091	-0.88	0.0392***	3.82
-4	0.0049	0.48	0.0441***	4.30
-3	0.0037	0.36	0.0478***	4.66
-2	0.0005	0.05	0.0483***	4.71
-1	-0.0007	-0.06	0.0476***	4.65
0	0.0087	0.85	0.0564***	5.50
1	-0.0029	-0.28	0.0534***	5.21
2	0.0020	0.20	0.0555***	5.41
3	0.0176*	1.72	0.0731***	7.13
4	-0.0054	-0.52	0.0678***	6.61
5	-0.0135	-1.31	0.0543***	5.30
6	0.0074	0.72	0.0617***	6.02
7	-0.0098	-0.96	0.0519***	5.06
8	0.0057	0.56	0.0576***	5.62
9	0.0088	0.86	0.0664***	6.48
10	-0.0020	-0.19	0.0645***	6.29
11	-0.0044	-0.42	0.0601***	5.86
12	0.0012	0.12	0.0613***	5.98
13	0.0158	1.54	0.0771***	7.52
14	0.0017	0.17	0.0788***	7.69
15	0.0029	0.28	0.0817***	7.97

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

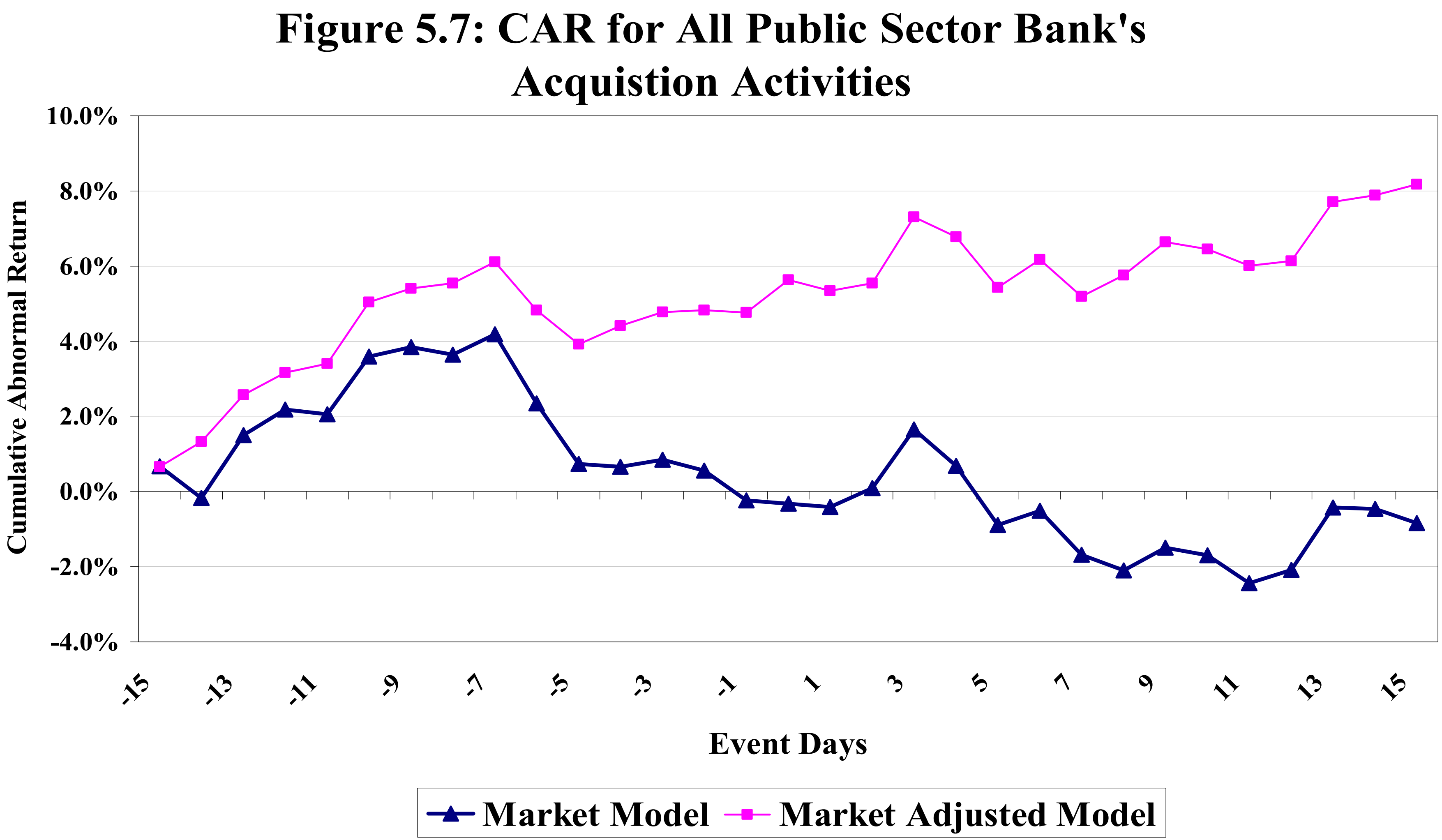


Figure 5.7: CAR for All Public Sector Bank's Acquistion Activities
10.0%
8.0%
6.0%
4.0%
2.0%
0.0%
-2.0%
-4.0%
Cumulative Abnormal Return
-15
-13
-11
-9
-7
-5
-3
-1
1
3
5
7
9
11
13
15
Event Days
Market Model
Market Adjusted Model

8. HDFC acquiring Times Bank Ltd

Table 5.15 depicts the risk adjusted daily abnormal returns and cumulative abnormal returns pertaining to the stock market reaction to the event associated with acquisition deal of HDFC with Times Bank Ltd. From the observation of the table, it is evident that the fluctuations in AR are balanced with significant positive and negative values on day -11, -8, and on day -4 in pre-event period and on day +3, +4, +5 and +10 in post-event period. However, 3 out of 4 significant AR in post-event period is positive, indicating that the investors are confidence about HDFC banks future plans which will be carried out by amalgamating the Times Bank Ltd. The risk adjusted cumulative abnormal returns are positive and significant at required hypothetical level for event windows from [-15, -11] to [-15, -9], from [-15, -5] to [-15, +2], [-15, +9] and from [-15, +12] to [-15, +15].

In order to identify the robustness of the above results, market adjusted ARs and CARs are calculated and shown in **Table 5.16.**

The table shows that market adjusted abnormal returns are almost similar to that of risk adjusted abnormal returns. But the market adjusted Cumulative abnormal returns differ from that of risk adjusted CARs. The Cumulative abnormal returns, which are negative and significant for 6 out of 15 event windows in pre-period. On the day of event, the CAR is also negative but significant marginally, in turn revealing that the investors would have started selling their shares in order to minimize their losses fearing that value of the shares would decline against acquisition deal. But the scenario after the acquisition announcement has changed.

The cumulative abnormal returns are positive and significant for 12 event windows from [-15, +4] to [-15, +15]. The cumulative abnormal return is as high as 23.64 per cent for 26 days event window from day -15 to day +10. Figure 5.8 shows the the risk adjusted and market adjusted CAR graphically using line chart. This scenario implies that there has been increase in shareholders wealth relative to market after HDFC bank's acquisition deal with Times Bank Ltd.

Table 5.15
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for HDFC Bank Ltd acquiring Times Bank Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	0.0344	0.84	0.0344	0.84
-14	-0.0004	-0.01	0.0340	0.83
-13	-0.0126	-0.31	0.0214	0.52
-12	-0.0248	-0.61	-0.0034	-0.08
-11	-0.1048**	-2.56	-0.1082***	-2.64
-10	0.0063	0.15	-0.1019**	-2.49
-9	-0.0069	-0.17	-0.1088***	-2.66
-8	0.0810**	1.98	-0.0278	-0.68
-7	-0.0188	-0.46	-0.0466	-1.14
-6	-0.0108	-0.26	-0.0574	-1.40
-5	-0.0528	-1.29	-0.1102***	-2.69
-4	-0.0818**	-2.00	-0.1920***	-4.69
-3	0.0218	0.53	-0.1702***	-4.16
-2	-0.0032	-0.08	-0.1734***	-4.24
-1	0.0056	0.14	-0.1678***	-4.10
0	-0.0138	-0.34	-0.1816***	-4.44
1	-0.0189	-0.46	-0.2005***	-4.90
2	0.0474	1.16	-0.1531***	-3.74
3	0.0855**	2.09	-0.0676	-1.65
4	0.0902**	2.20	0.0226	0.55
5	-0.0797*	-1.95	-0.0571	-1.40
6	-0.0047	-0.11	-0.0618	-1.51
7	0.0501	1.22	-0.0117	-0.29
8	-0.0291	-0.71	-0.0408	-1.00
9	-0.0311	-0.76	-0.0719*	-1.76
10	0.0922**	2.25	0.0203	0.50
11	-0.0398	-0.97	-0.0195	-0.48
12	-0.0545	-1.33	-0.0740*	-1.81
13	0.0030	0.07	-0.0710*	-1.73
14	-0.0214	-0.52	-0.0924**	-2.26
15	0.0203	0.50	-0.0721*	-1.76

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Table 5.16
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for HDFC Bank Ltd acquiring Times Bank Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	0.0327	0.79	0.0327	0.79
-14	-0.0005	-0.01	0.0322	0.78
-13	-0.0069	-0.17	0.0253	0.61
-12	-0.0248	-0.60	0.0005	0.01
-11	-0.1048**	-2.53	-0.1043**	-2.51
-10	0.0148	0.36	-0.0895**	-2.16
-9	0.0076	0.18	-0.0819*	-1.97
-8	0.0933**	2.25	0.0114	0.27
-7	-0.0170	-0.41	-0.0056	-0.13
-6	0.0035	0.08	-0.0021	-0.05
-5	-0.0536	-1.29	-0.0557	-1.34
-4	-0.0742*	-1.79	-0.1299**	-3.13
-3	0.0430	1.04	-0.0869**	-2.09
-2	-0.0048	-0.12	-0.0917**	-2.21
-1	0.0239	0.58	-0.0678	-1.63
0	-0.0125	-0.30	-0.0803*	-1.94
1	0.0056	0.13	-0.0747*	-1.80
2	0.0439	1.06	-0.0308	-0.74
3	0.1000**	2.41	0.0692	1.67
4	0.1070**	2.58	0.1762***	4.25
5	-0.0803*	-1.94	0.0959**	2.31
6	-0.0008	-0.02	0.0951**	2.29
7	0.0627	1.51	0.1578***	3.80
8	-0.0105	-0.25	0.1473***	3.55
9	-0.0216	-0.52	0.1257***	3.03
10	0.1107**	2.67	0.2364***	5.70
11	-0.0348	-0.84	0.2016***	4.86
12	-0.0511	-1.23	0.1505***	3.63
13	0.0200	0.48	0.1705***	4.11
14	-0.0154	-0.37	0.1551***	3.74
15	0.0240	0.58	0.1791***	4.32

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

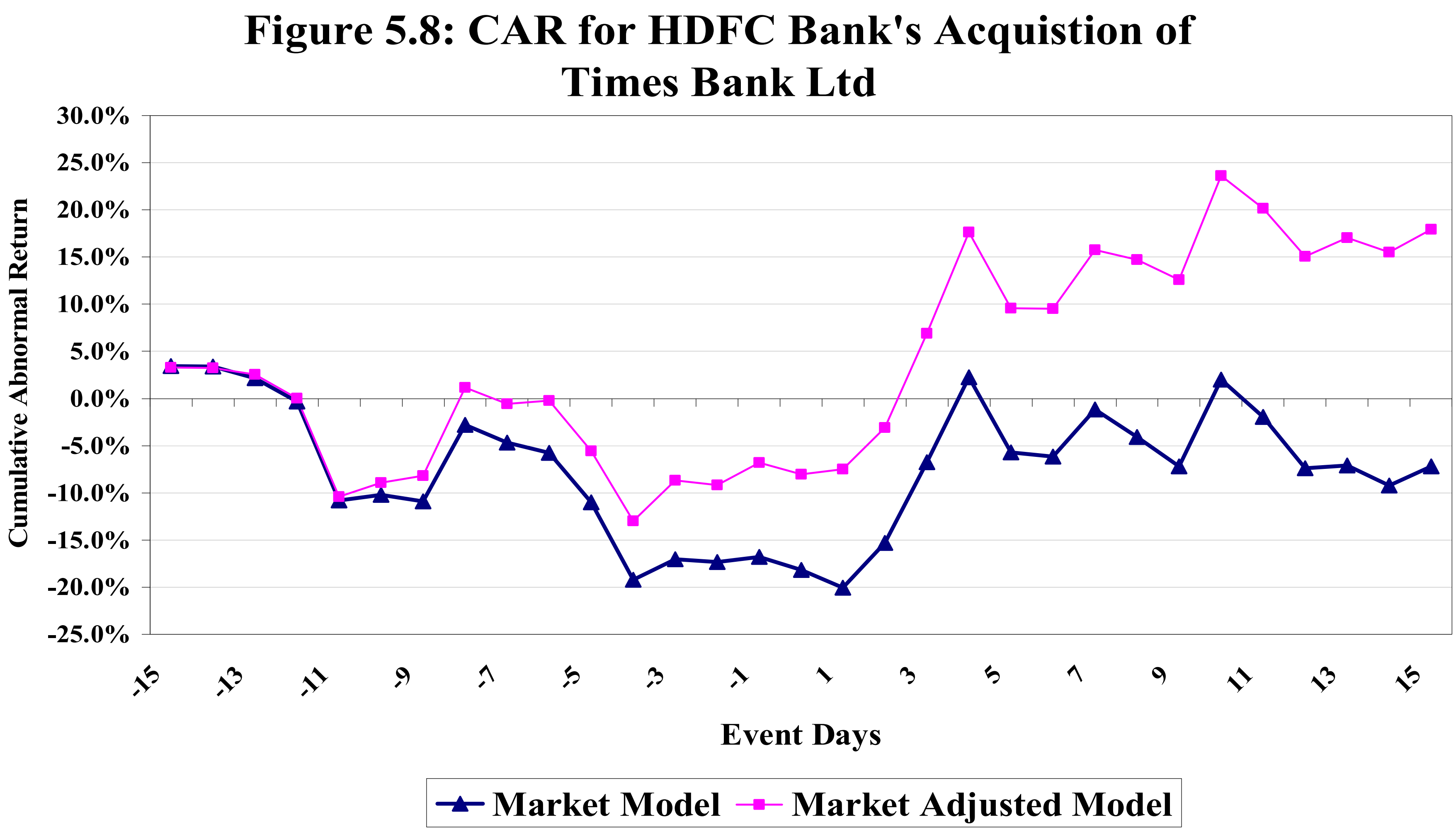


Figure 5.8: CAR for HDFC Bank's Acquistion of Times Bank Ltd
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
-5.0%
-10.0%
-15.0%
-20.0%
-25.0%
Cumulative Abnormal Return
-15
-13
-11
-9
-7
-5
-3
-1
1
3
5
7
9
11
13
15
Event Days
Market Model
Market Adjusted Model

9. ICICI Banks acquiring Bank of Madura Ltd

The daily abnormal returns and cumulative abnormal returns based on market model is calculated for eliciting the stock market reaction to acquisition activity of ICICI banks with Bank of Madura Ltd and the results of the same are reported in **Table 5.17.** As per table, abnormal return on day -15 (AR = -0.1268, t = -3.32, $p < 0.01$) and day -5 (AR = -0.0654, t = -1.71, $p < 0.10$) is negative and significant at 1 per cent and 10 per cent level respectively.

For all of the event windows up to day -8 in pre-period, the cumulative abnormal returns are negative and significant at 1 per cent level. The negative significant AR and CAR envisages that there has been takeover news leak and market tend to react negatively to it by minimizing the share value as market has not anticipated such news.

However, AR stood at positive and significant level of 11.15 per cent and 15.03 per cent on day -7 and -6 respectively.

Further CAR is positive and significant in the event windows [-15, -6], [-15, -4] and [-15, -1], indicating the restrictions in panic selling. But the scenario is not the same after the official release of acquisition deal. The CAR, though insignificant, is negative on the day of the press release, and from day +5, there has been continuous decline in shareholder wealth as the CAR is negative and significant for event windows from [-15, +5] to [-15, +9] as well as for 30 [-15, +14] and 31 days [-15, +15] event windows. This shows that there has been destruction in shareholder wealth on the event of acquisition deal of ICICI bank with Bank of Madura Ltd.

Table 5.17
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for ICICI Bank Ltd acquiring Bank of Madura Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	-0.1268***	-3.32	-0.1268***	-3.32
-14	-0.0022	-0.06	-0.1290***	-3.38
-13	0.0135	0.35	-0.1155***	-3.03
-12	0.0078	0.20	-0.1077***	-2.82
-11	-0.0266	-0.70	-0.1343***	-3.52
-10	-0.0006	-0.02	-0.1349***	-3.54
-9	-0.0219	-0.57	-0.1568***	-4.11
-8	0.0036	0.09	-0.1532***	-4.02
-7	0.1115***	2.92	-0.0417	-1.09
-6	0.1503***	3.94	0.1086***	2.85
-5	-0.0654*	-1.71	0.0432	1.13
-4	0.0379	0.99	0.0811**	2.13
-3	-0.0491	-1.29	0.0320	0.84
-2	0.0227	0.60	0.0547	1.43
-1	0.0166	0.44	0.0713*	1.87
0	-0.0875**	-2.29	-0.0162	-0.42
1	-0.0436	-1.14	-0.0598	-1.57
2	0.0211	0.55	-0.0387	-1.01
3	0.0807**	2.12	0.0420	1.10
4	-0.0897**	-2.35	-0.0477	-1.25
5	-0.0282	-0.74	-0.0759**	-1.99
6	-0.0033	-0.09	-0.0792**	-2.08
7	-0.0550	-1.44	-0.1342***	-3.52
8	0.0464	1.22	-0.0878**	-2.30
9	0.0009	0.02	-0.0869**	-2.28
10	0.0687*	1.80	-0.0182	-0.48
11	-0.0173	-0.45	-0.0355	-0.93
12	0.0011	0.03	-0.0344	-0.90
13	0.0159	0.42	-0.0185	-0.48
14	-0.0680*	-1.78	-0.0865**	-2.27
15	0.0077	0.20	-0.0788**	-2.07

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

The market adjusted abnormal return and cumulative abnormal returns for ICICI bank takeover of Bank of Madura are presented in **Table 5.18.** According to table, the market adjusted abnormal returns corroborates risk adjusted abnormal returns. However, market adjusted Cumulative abnormal returns differ from that of risk adjusted CAR.

The market adjusted CAR, which is significant at negative level for pre-period event windows up to [-15, -8]. But for all event windows from [-15, -6] to [-15, +15] except [-15, +7], the CAR values are positive and significant at 1 per cent level. That is, from the day near to announcement to 15 days after the announcement, the market tend to show positive reaction by increasing wealth to the shareholders. Figure 5.9 presents the status of both CAR graphically.

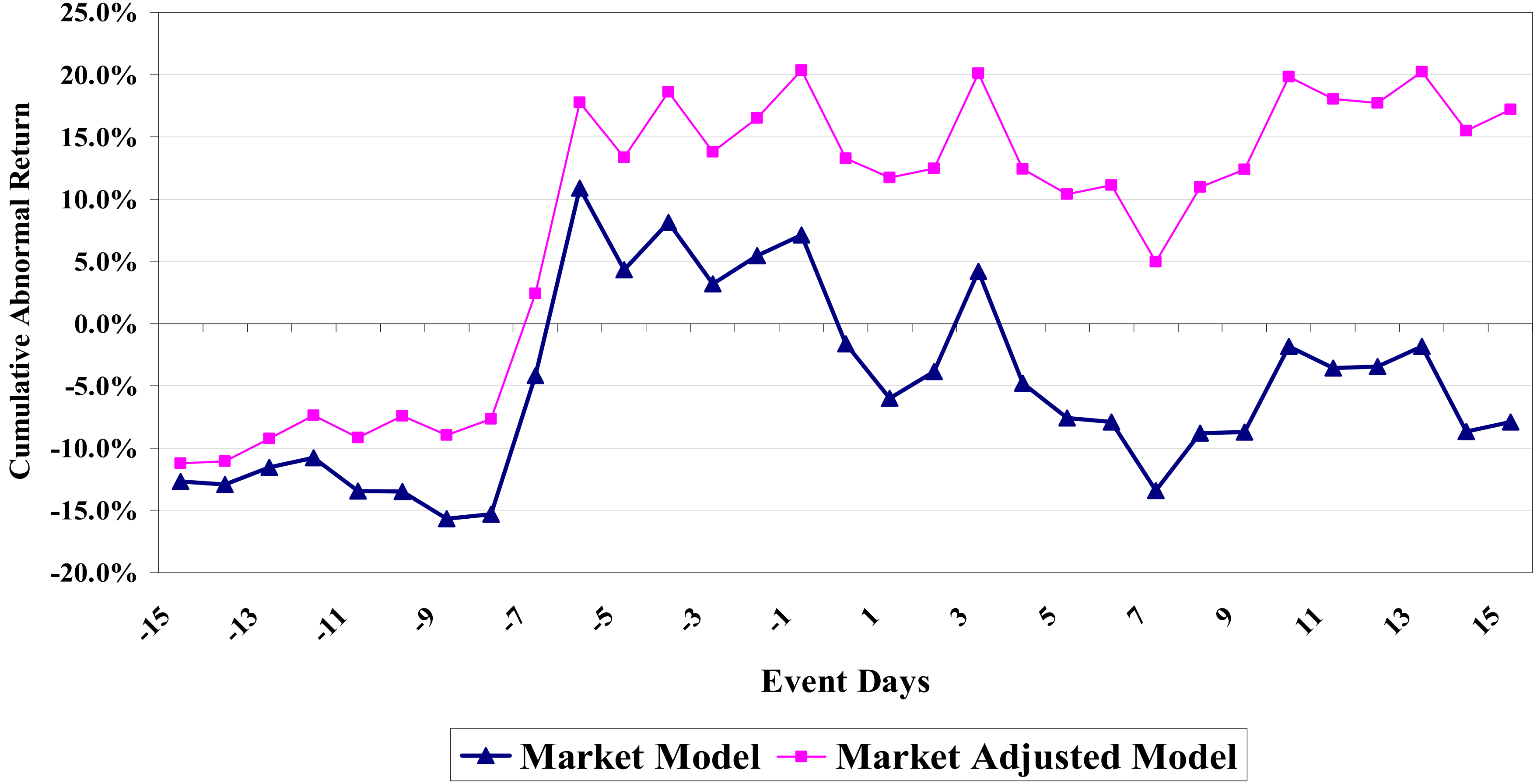
Table 5.18
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for ICICI Bank Ltd acquiring Bank of Madura Ltd

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	-0.1121***	-2.90	-0.1121***	-2.90
-14	0.0016	0.04	-0.1105***	-2.86
-13	0.0183	0.47	-0.0922**	-2.39
-12	0.0183	0.47	-0.0739*	-1.91
-11	-0.0176	-0.46	-0.0915**	-2.37
-10	0.0173	0.45	-0.0742*	-1.92
-9	-0.0155	-0.40	-0.0897**	-2.32
-8	0.0131	0.34	-0.0766**	-1.98
-7	0.1006**	2.61	0.0240	0.62
-6	0.1537***	3.98	0.1777***	4.60
-5	-0.0442	-1.14	0.1335***	3.46
-4	0.0524	1.36	0.1859***	4.82
-3	-0.0481	-1.25	0.1378***	3.57
-2	0.0273	0.71	0.1651***	4.28
-1	0.0384	0.99	0.2035***	5.27
0	-0.0708*	-1.83	0.1327***	3.44
1	-0.0153	-0.40	0.1174***	3.04
2	0.0070	0.18	0.1244***	3.22
3	0.0767**	1.99	0.2011***	5.21
4	-0.0768**	-1.99	0.1243***	3.22
5	-0.0203	-0.53	0.1040***	2.69
6	0.0073	0.19	0.1113***	2.88
7	-0.0616	-1.60	0.0497	1.29
8	0.0597	1.55	0.1094***	2.83
9	0.0145	0.38	0.1239***	3.21
10	0.0741*	1.92	0.1980***	5.13
11	-0.0178	-0.46	0.1802***	4.67
12	-0.0029	-0.08	0.1773***	4.59
13	0.0251	0.65	0.2024***	5.24
14	-0.0477	-1.24	0.1547***	4.01
15	0.0172	0.45	0.1719***	4.45

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Figure 5.9: CAR for ICICI Bank's Acquistion of Bank of Madura Ltd



10. Private sector banks

Table 5.19 presents the abnormal returns and cumulative abnormal returns based on market model for 31 day event periods from -15 to +15 to ascertain the stock market reaction to acquisition activities of two private sector banks under study. It can be observed from table that the abnormal returns are negative on day -11 (AR = -0.0657, t = -2.23, $p < 0.05$) and day -5 (AR = -0.0591, t = -2.00, $p < 0.05$) while it is positive on day -6 (AR = 0.0698, t = 2.36, $p < 0.05$) during pre-event period and all are significant.

During the period after announcement, the abnormal returns are positive and significant at 1 per cent and 5 per cent levels on day +3 (AR = 0.0831, t = 2.81, $p < 0.01$) and day +10 (AR = 0.0805, t = 2.73, $p < 0.05$) respectively. The cumulative abnormal returns are, however, not significant for all event windows from day -15 to day +15. Moreover, the CAR values are negative for majority of the event windows. The cumulative abnormal return is positive and significant for event windows from [-15, -14] to [-15, -8] as well as from [-15, -4] to [-15, -2] in pre-period.

The above picture implies that the market has anticipated the acquisition events in two private sector banks and considered the acquisition activities as unfavourable, in turn destructing the shareholder wealth. On the day of event also, the CAR is negative and significant at 1 per cent level.

The scenario implies that there has been negative reaction to acquisition deal in the market. Out of 15 event windows, the CAR values are negative and significant at 1 per cent level for 9 event windows in post-event period. There has been significant reduction in shareholder wealth to the extent of 7.55 per cent during 31 days event periods. This envisages that investors were panic about acquisition deal and started to sell of their shares to minimize their losses.

Table 5.19
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for Private Sector Banks' Acquisition Activities During Post Liberalisation Period

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	-0.0462	-1.56	-0.0462	-1.56
-14	-0.0013	-0.04	-0.0475	-1.61
-13	0.0005	0.02	-0.0471	-1.59
-12	-0.0085	-0.29	-0.0556*	-1.88
-11	-0.0657**	-2.23	-0.1213***	-4.11
-10	0.0029	0.10	-0.1184***	-4.01
-9	-0.0144	-0.49	-0.1328***	-4.50
-8	0.0423	1.43	-0.0905***	-3.07
-7	0.0464	1.57	-0.0442	-1.50
-6	0.0698**	2.36	0.0256	0.87
-5	-0.0591**	-2.00	-0.0335	-1.13
-4	-0.0220	-0.74	-0.0555*	-1.88
-3	-0.0137	-0.46	-0.0691**	-2.34
-2	0.0098	0.33	-0.0594**	-2.01
-1	0.0111	0.38	-0.0483	-1.63
0	-0.0507*	-1.72	-0.0989***	-3.35
1	-0.0313	-1.06	-0.1302***	-4.41
2	0.0343	1.16	-0.0959***	-3.25
3	0.0831***	2.81	-0.0128	-0.43
4	0.0003	0.01	-0.0126	-0.43
5	-0.0540*	-1.83	-0.0665**	-2.25
6	-0.0040	-0.14	-0.0705**	-2.39
7	-0.0025	-0.08	-0.0730**	-2.47
8	0.0087	0.29	-0.0643**	-2.18
9	-0.0151	-0.51	-0.0794***	-2.69
10	0.0805**	2.73	0.0011	0.04
11	-0.0286	-0.97	-0.0275	-0.93
12	-0.0267	-0.90	-0.0542*	-1.84
13	0.0095	0.32	-0.0448	-1.52
14	-0.0447	-1.51	-0.0895***	-3.03
15	0.0140	0.47	-0.0755**	-2.56

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

In Table 5.20 the market adjusted abnormal returns and cumulative abnormal returns for 15 days event periods surrounding the announcement day in order to ascertain the stock market reaction to two private sector banks (combined) acquisition bids are depicted**.** An observation of the table indicates that the condition of abnormal return is almost similar to the condition of risk adjusted abnormal returns. The market adjusted abnormal return is negative and significant on day -11 (AR = -0.0612, t = -1.89, p <0.10) while it is positive and significant on day -6 (AR = 0.0786, t = 2.43, p < 0.05) during pre-period. The significant abnormal returns in some of the days during pre-period has revealed the market's anticipation of the upcoming acquisition deals of the private sector banks.

During post-period, the abnormal return is positive on day +3 (AR = 0.0884, t = 2.73, p < 0.01) and on day +10 (AR = 0.0924, t = 2.86, p < 0.01). The significant abnormal returns on two days during post-period has indicated that market has considered the deal favourably.

In post-period, the market adjusted cumulative abnormal returns are negative and significant for event windows from [-15, -11] to [-15, -9], whereas it is positive and significant for event window [-15, -6] and [-15, -1]. This shows that the market has anticipated the upcoming acquisition deal of the private sector banks. Initially, market has thought it to be unfavourable, but situated changed near to press release. The cumulative abnormal returns are positive and significant at 1 per cent level for event windows from [-15, +3] to [-15, +15]. The graphical presentation of the fluctuations in risk adjusted and market adjusted CAR is portrayed in Figure 5.10. The above status of CAR has provided evidence that market considered the deal positively after press release and incorporated its positive reactions by increasing market value of shares of these two banks.

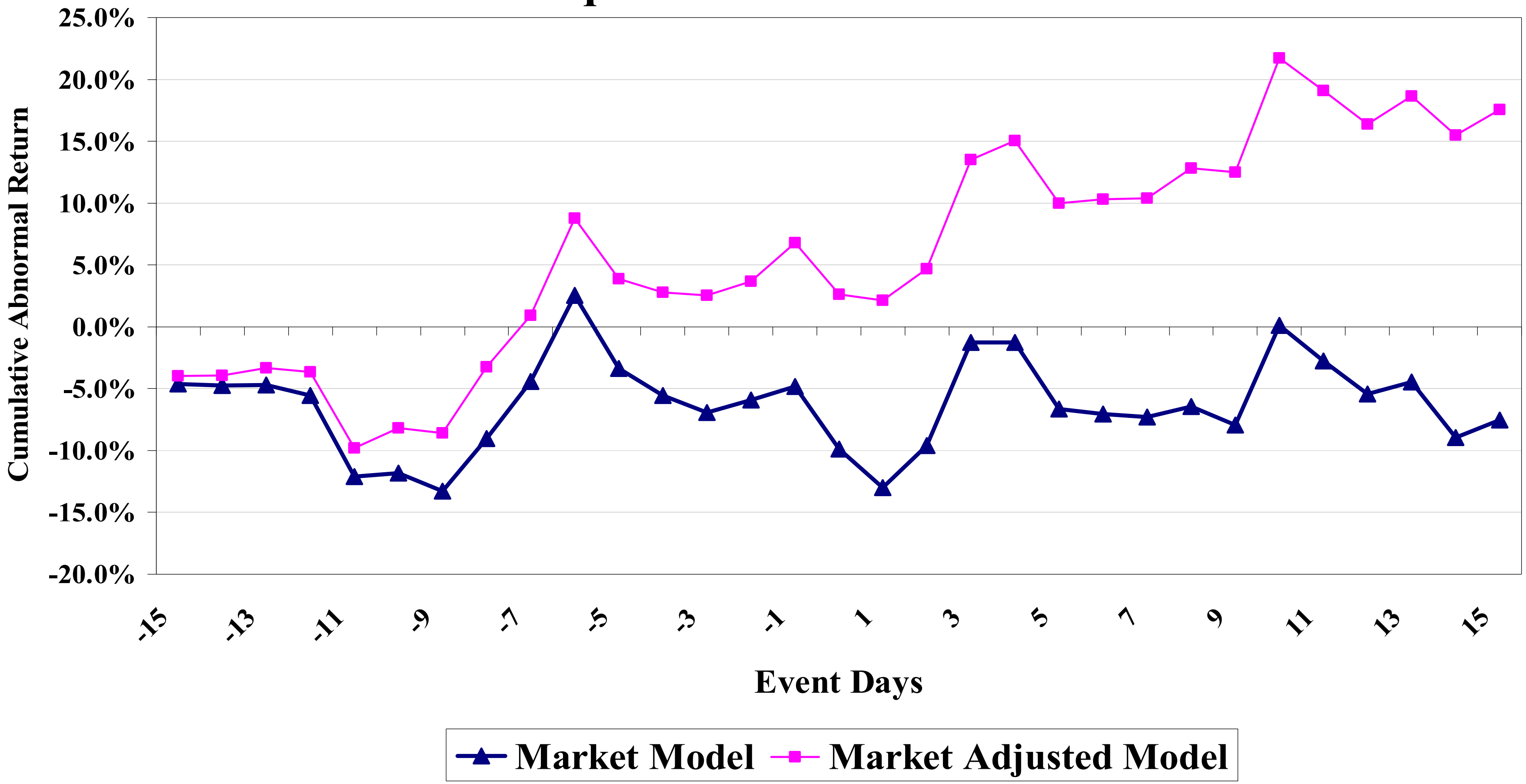
Table 5.20
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for Private Sector Banks' Acquisition Activities During Post Liberalisation Period

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	-0.0397	-1.29	-0.0397	-1.29
-14	0.0006	0.02	-0.0392	-1.28
-13	0.0057	0.19	-0.0335	-1.09
-12	-0.0033	-0.11	-0.0367	-1.20
-11	-0.0612**	-2.00	-0.0979***	-3.19
-10	0.0161	0.52	-0.0819***	-2.67
-9	-0.0040	-0.13	-0.0858***	-2.80
-8	0.0532*	1.73	-0.0326	-1.06
-7	0.0418	1.36	0.0092	0.30
-6	0.0786**	2.56	0.0878***	2.86
-5	-0.0489	-1.59	0.0389	1.27
-4	-0.0109	-0.36	0.0280	0.91
-3	-0.0026	-0.08	0.0255	0.83
-2	0.0113	0.37	0.0367	1.20
-1	0.0312	1.02	0.0679**	2.21
0	-0.0417	-1.36	0.0262	0.85
1	-0.0049	-0.16	0.0214	0.70
2	0.0255	0.83	0.0468	1.53
3	0.0884***	2.88	0.1352***	4.41
4	0.0151	0.49	0.1503***	4.90
5	-0.0503	-1.64	0.1000***	3.26
6	0.0033	0.11	0.1032***	3.36
7	0.0006	0.02	0.1038***	3.38
8	0.0246	0.80	0.1284***	4.18
9	-0.0036	-0.12	0.1248***	4.07
10	0.0924	3.01	0.2172***	7.08
11	-0.0263	-0.86	0.1909***	6.22
12	-0.0270	-0.88	0.1639***	5.34
13	0.0226	0.74	0.1865***	6.08
14	-0.0316	-1.03	0.1549***	5.05
15	0.0206	0.67	0.1755***	5.72

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Figure 5.10: CAR for All Select Private Bank's Acquistion of Activities



Test of Hypothesis: 4

Ho: There is no difference in abnormal returns of the merged banks before and after announcement period under both MM & MAM)

H1: There is difference in abnormal returns of the merged banks before and after announcement period under both MM & MAM)

Conclusion: Reject Null Hypothesis because There is difference in abnormal returns of the merged banks before and after announcement period under both MM & MAM

Test of Hypotheses: 5

Ho: There is no difference in cumulative abnormal returns of the merged banks before and after announcement period under both MM & MAM)

H1: There is difference in cumulative abnormal returns of the merged banks before and after announcement period under both MM & MAM)

Conclusion: Reject Null Hypothesis because There is difference in cumulative abnormal returns of the merged banks before and after announcement period under both MM & MAM

11. Public sector and Private sector banks'

To evaluate market reaction to public sector and private sector banks' activities acquiring other private limited banks, the abnormal returns and cumulative abnormal returns for 15 days surrounding the event day (31 days event period) based on market model (risk adjusted models) are given in **Table 5.21.** According to table, the risk adjusted abnormal return is negative and significant at 10 per cent level on day -11 (AR = -0.0178, t = -1.92, $p < 0.10$). On day -5 in pre-period also, the abnormal return is negative and significant at 5 per cent level (AR = -0.0232, t = -2.49, $p < 0.05$).

Table 5.21
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET MODEL for Acquisition Activities of Public and Private Sector Banks During Post Liberalisation Period

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	-0.0077	-0.82	-0.0077	-0.82
-14	0.0016	0.17	-0.0060	-0.65
-13	0.0079	0.85	0.0018	0.20
-12	0.0031	0.33	0.0049	0.53
-11	-0.0178*	-1.92	-0.0129	-1.39
-10	0.0124	1.34	-0.0005	-0.05
-9	-0.0003	-0.03	-0.0007	-0.08
-8	0.0113	1.22	0.0106	1.14
-7	0.0136	1.46	0.0242**	2.60
-6	0.0065	0.70	0.0307***	3.30
-5	-0.0232**	-2.49	0.0075	0.81
-4	-0.0025	-0.27	0.0050	0.54
-3	-0.0038	-0.41	0.0012	0.13
-2	0.0002	0.02	0.0014	0.15
-1	0.0007	0.08	0.0021	0.23
0	-0.0093	-1.00	-0.0072	-0.78
1	-0.0100	-1.07	-0.0172*	-1.85
2	0.0088	0.95	-0.0084	-0.90
3	0.0320***	3.44	0.0237*	2.54
4	-0.0065	-0.70	0.0171*	1.84
5	-0.0252***	-2.71	-0.0081	-0.87
6	0.0036	0.38	-0.0045	-0.49
7	-0.0084	-0.90	-0.0129	-1.39
8	0.0032	0.35	-0.0097	-1.04
9	0.0029	0.31	-0.0068	-0.73
10	0.0163*	1.75	0.0095	1.02
11	-0.0116	-1.25	-0.0021	-0.23
12	-0.0051	-0.55	-0.0072	-0.78
13	0.0135	1.46	0.0063	0.68
14	-0.0091	-0.98	-0.0028	-0.30
15	0.0049	0.52	0.0021	0.22

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

This scenario envisages that leakage of information about acquisition deal by banks reflected in the share prices. During post-event period, on day +3 (AR = 0.0320, t = 3.44, $p < 0.01$) and day +10 (AR = 0.0163, t = 1.75, $p < 0.10$), the AR is positive and significant, and on day + 5 (AR = -0.0252, t = -2.71, $p < 0.01$), it is negative and significant. However, on the remaining days in post-event period, the fluctuations in AR are balanced with positive and negative values and they are not significant statistically. This shows that market remained stable with acquisition activities of bank.

The fluctuations is cumulative abnormal returns are also balanced with positive and negative values in all event windows between day -15 and day +15. At the same time, CAR for event window [-15, -7] and [-15, -6] in pre-period as well as [-15, +3] and [-15, +4] in post-period is positive and significant, whereas the CAR for event window [-15, +1] is negative and significant. The level of significance of CAR, either positive or negative, in post-period has been just at marginal level. The significant CAR for event windows prior to announcement has shown that the market has quickly reacted to the information leakage regarding upcoming takeover bid of public and private sector banks. From marginally significant and insignificant CAR values in post-event windows, it is understood that the market has tried to react negatively to the most of the banks' acquisition announcement but overall there was neither destruction or creation in shareholder wealth of investors of public and private sector banks.

The market adjusted average abnormal returns and cumulative average abnormal returns for acquisition activities of all public sector and private sector banks are reported in **Table 5.22**. The market adjusted abnormal returns are fluctuated between negative and positive values and it is negative and marginally significant at 10 per cent level on day -5 during pre-period. The insignificant AR values in pre-period reveals that there is no information leakage or delay in market reaction to upcoming acquisition deal of the banks. The significant market adjusted abnormal return is positive on day +3, +10 and +13 and negative on day +5. It seems from the above that market tend to react positively after press release of acquisition announcement. The market adjusted cumulative abnormal returns are positive for all event windows from [-15, -14] to [-15, +15] and they are significant for windows from [-15, -10] to [-15, +15]. How, risk adjusted and market adjusted CAR are fluctuating in 31 days event period are represented graphically in Figure 5.11.

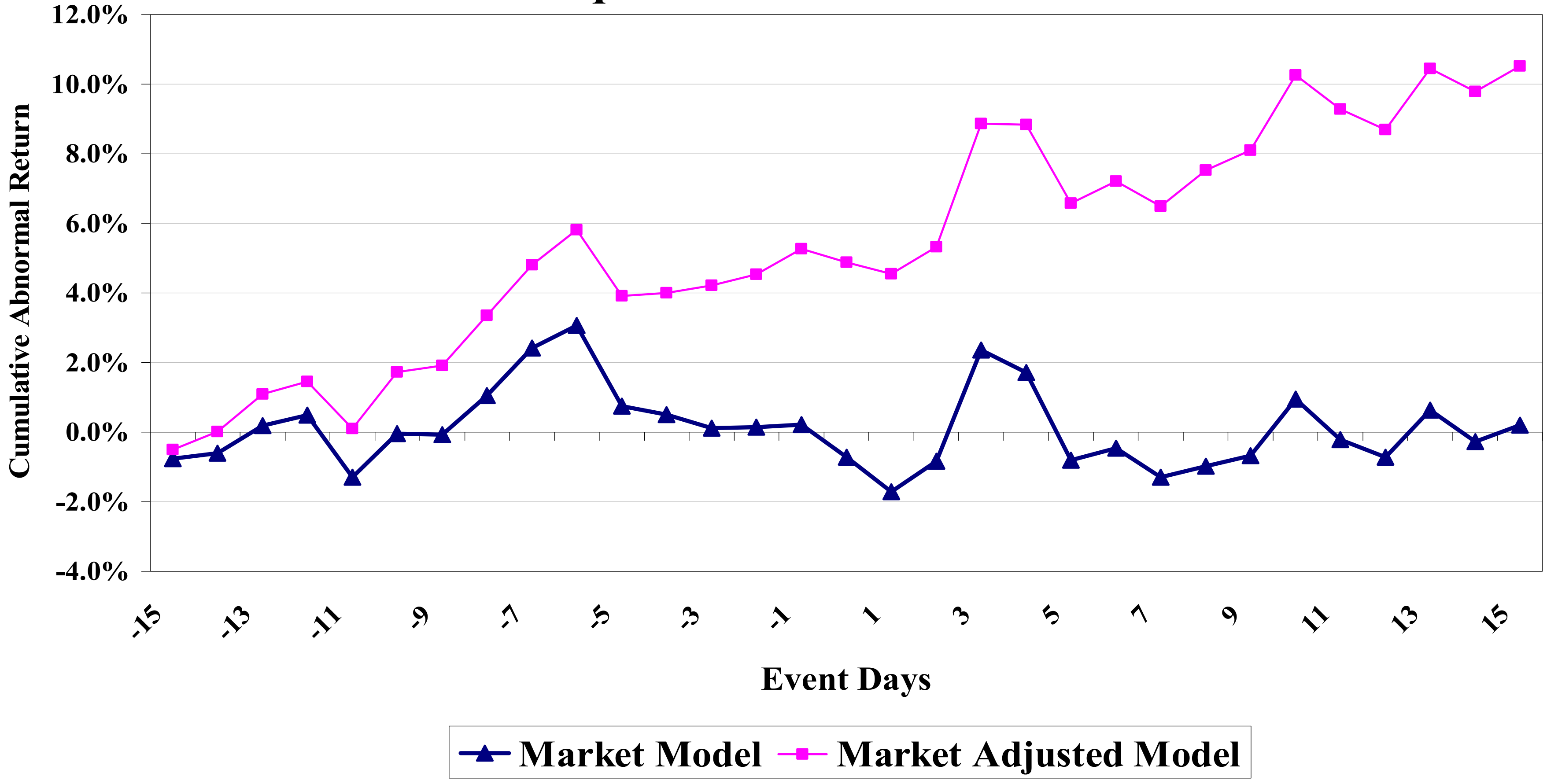
Table 5.22
Event Period Abnormal and Cumulative Abnormal Daily Returns Based on MARKET ADJUSTED MODEL for Acquisition Activities of Public and Private Sector Banks During Post Liberalisation Period

Day Relative to Announcement	Abnormal Return	't' Value (Abnormal Return)	Cumulative Abnormal Return	't' Value (Cumulative Abnormal Return)
-15	-0.0050	-0.52	-0.0050	-0.52
-14	0.0052	0.54	0.0002	0.02
-13	0.0108	1.11	0.0110	1.12
-12	0.0036	0.37	0.0145	1.49
-11	-0.0135	-1.38	0.0010	0.11
-10	0.0163	1.67	0.0173*	1.78
-9	0.0018	0.19	0.0191**	1.96
-8	0.0144	1.47	0.0335***	3.44
-7	0.0146	1.50	0.0481***	4.94
-6	0.0100	1.03	0.0581***	5.97
-5	-0.0190*	-1.95	0.0391***	4.01
-4	0.0010	0.10	0.0401***	4.11
-3	0.0021	0.22	0.0422***	4.33
-2	0.0032	0.33	0.0454***	4.66
-1	0.0073	0.75	0.0527***	5.41
0	-0.0039	-0.40	0.0488***	5.01
1	-0.0034	-0.35	0.0454***	4.66
2	0.0079	0.81	0.0533***	5.47
3	0.0353***	3.63	0.0886***	9.10
4	-0.0002	-0.02	0.0884***	9.08
5	-0.0227**	-2.33	0.0657***	6.75
6	0.0064	0.65	0.0721***	7.40
7	-0.0072	-0.74	0.0649***	6.66
8	0.0104	1.07	0.0753***	7.73
9	0.0057	0.59	0.0810***	8.32
10	0.0216**	2.22	0.1026***	10.54
11	-0.0098	-1.01	0.0928***	9.53
12	-0.0058	-0.60	0.0870***	8.93
13	0.0175*	1.79	0.1045***	10.73
14	-0.0066	-0.68	0.0979***	10.05
15	0.0073	0.75	0.1051***	10.80

Source: Computed on the basis of CMIE Data Source

***Significant at 1% level; **Significant at 5% level; *Significant at 10% level

Figure 5.11: CAR for All Select Public and Private Bank's Acquistion of Activities



From positive and significant CAR values, it is found that the investors of four are earned returns significantly higher than return earned by not suffered with any loss in their investment due to acquisition announcement of the bankers, instead they earned significantly higher return compared to return from market portfolio

Conclusion

The banking industry has been undergoing major consolidation in recent years, with a number of global players emerging through successive mergers and acquisitions. This creates a great deal of uncertainty for all the stakeholders concerned. This research has pointed some elements that are explained and justified by the very nature of merger and acquisition of banking firms in India. The motivation for mergers and acquisitions were examined to establish the extent to which the benefits accrue as a viable factor in enhancing firms' performance and resultant increase in shareholder's wealth. Though there exist some skepticism that these efforts would make the bank lose its cost efficiencies, it is agreed that higher market prices emerges as a distinct beneficial outcome of mergers and acquisitions. This study shows that in a banking environment marked by frequent mergers, such transactions directly or indirectly effect the shareholders sentiments and increase market share (i.e.) mergers enhances performance and wealth for both the businesses and shareholders.

CHAPTER VI

IMPLICATIONS OF MERGER – A PERCEPTIONAL STUDY

This chapter portrays the pre merger attitude and Post merger attitude of the employees were derived and then compared with their demographic data. The worthiness of merger and acquisition activities of public and private sector banks has been evaluated based on the perception of the bank employees in relation to their attitude before and after the M &A event took place.

A well defined questionnaire with 5 statements for pre-merger period status and 14 statements for post-merger period status using 5-point Likert type scale ranging from ‘1’ for “strongly disagree”, ‘2’ for “disagree”, ‘3’ for “neutral” (Neither disagree nor agree), ‘4’ for “agree” to ‘5’ for “strongly agree” is put forth 100 randomly selected employees in both public and private sector banks for ascertaining their pre-merger attitude and post-merger attitude. The mean scores are calculated for ascertaining pre and post merger efficacy. In order to know whether the opinion of the respondents about pre and post merger status is independent of their socio-economic characteristics or not, the mean perception scores are compared across categories by socio-economic characteristics and the significance of the difference in mean values are checked using t-test for two groups and F-test (one-way ANOVA) for more than two groups. The results of the analysis are tabulated and discussed in the remaining part of this chapter.

6.1. Demographic Profile of Respondents

To elicit the views of employees about the attitudinal changes in post merger period an in-depth survey has been conducted form among bank employees who are working in the study unit bank branches located in Puducherry city.

Table 6.1 clearly states that respondents (employees in the sample) from public sector banks (79%) outnumber the private sector banks (21.0%). The respondents aged above 40 years comprise 31.0 per cent of the sample, while 34.0 per cent and 35.0 per cent of the employees in the sample aged between 31-40 years and up to 30 years respectively. The male group constitute 71.0 per cent while remaining 29 per cent comprises of female employees. The clerks and officers in the sample are equally divided.

Table 6.1
Demographic Profile of the respondents

Profile	Number of Respondents	Percent
Banking Sector		
Public	79	79.0
Private	21	21.0
Age		
Up to 30	34	34.0
31 – 40	35	35.0
Above 40	31	31.0
Sex		
Male	71	71.0
Female	29	29.0
Designation		
Clerk	50	50.0
Officer	50	50.0
Marital Status		
Married	64	64.0
Unmarried	36	36.0
Education		
Below Degree	17	17.0
Degree	54	54.0
Above Degree	29	29.0
Experience		
Up to 5 years	37	37.0
6 - 15 years	41	41.0
Above 15 years	22	22.0
Monthly Income		
Up to Rs.150000	39	39.0
Rs.150000-500000	44	44.0
Above Rs.500000	17	17.0
Family Type		
Joint	55	55.0
Nuclear	45	45.0
Total Sample	100	100.0

Source: Primary Data.

While number of married cases is 64.0 per cent, the remaining 36.0 per cent of the total cases is unmarried. Regarding education, graduates are higher (54.0%) followed by post-graduates and above degree group with 29.0 per cent, and below degree group with 17.0 per cent. The employee group with experience between 6-15 years is 41.0 per cent, up to 5 years is 37.00 per cent and those with experience in the job for above 15 years is 22.0 per cent. As far as the annual income is concerned, 44.0 per cent of the respondents earn between Rs.150000 – 500000, while 39.0 per cent earn up to Rs.150000. Further, it is evident that majority of the sample respondents are from joint families (55.0%).

6.2. Employees' perception during pre-merger period

The attitude of the bank employees before merging activities are analyzed by averaging the scores of all five statements. In order to find out whether obtained mean scores are in the "disagree", "agree" or "neutral" range, the calculated mean opinion scores are compared with 3, the value for neutral level, which is considered as hypothetical mean, Z test is used. The significant and negative Z value reveals the "disagree" attitude and significant positive Z value indicates the "agree" attitude of the entire respondents in the sample. From insignificant Z value, it can be understood that the respondents are neither disagree nor agree with the statement. In the comparative analysis, the mean scores below 2.50 indicates that the number of respondents with "disagree" and "strongly disagree" opinion is more. Similarly, the mean scores above 3.50 shows that there are more cases with "agree" opinion. The score above 2.50 and below 3.50 shows the dominance of "neutral" opinion cases.

Table 6.2
Perception of employees during pre-merger period

S. No	Statements	Mean	SD	Z value
1	I was nervous about my future when I heard about the merger	3.61	0.99	6.14***
2	The communication from top management about the merger plans was assuring	3.64	0.88	7.26***
3	I feel sufficiently informed about the process of the merger	3.51	0.87	5.86***
4	I understand the objectives behind the merger	3.52	0.98	5.31***
5	I believe that the merger is the right way for the Bank to become market leader in India	3.53	0.92	5.79***

Source: Primary Data. ***Significant at 1% level.

Table 6.2 present the results for pre-merging activities and Table 6.3 for post-merging activities.

It can be observed from **table 6.2** that the mean scores are above 3.50 for all statements, and all scores are significantly different from ‘neutral’ level. That is, most of the employees in both public and private sector bank have agreed that “they are nervous about their future when they heard about the merger”, “the communication from top management about the merger plans was assuring”, “feel sufficiently informed about the process of the merger”, “understand the objectives behind the merger” and “believe that the merger is the right way for the Bank to become market leader in India”.

6.3. Employees' perception during post -merger period

According to table 6.3, the Z values for all statements are positive, in turn indicating that there has been an agreement among respondents about various aspects of "after merging activities". The mean value is as high as 3.80 ("I look towards my professional future at the Bank in a positive way") and low of 3.22 ("Present Salary Structure at the Merged Bank is good"). So, it is deduced that the bank employees have agreed that they "perceive the professional future at the bank in a positive way after merging activities", "feel welcome and respected by my new colleagues", "feel adequately involved in changes to my work environment", "their supervisor provides them with the necessary orientation concerning the merging process", "suggestions / feedback are always received by my supervisors", "have a clear understanding of my role within the new Bank", "feeling happy at Work place", "Feel good with the merged Bank", "Present Salary Structure at the Merged Bank is good". They also have agreed that "they miss their colleagues from the previous bank", "out of place in the new Bank", "they experience frustration and stress from their my attempts to adapt to the culture in the merged Bank" and "feel nervous and uncomfortable when meeting individuals from the merged Bank" after merging activities.

Employees perception and demographic factors association

In order to conclude that the findings based on the entire samples' attitude are irrefutable, the perception of the respondents are compared based on their demographic characteristics to know whether the respondents irrespective of the socio-economic characteristics are similar or dissimilar in their opinion. If the difference in opinion across respondent groups is insignificant, then the findings based on the entire sample is conclusive and unquestionable. The results of the analysis are tabulated and discussed hereunder.

Table 6.3
Employees' perception during post-merger period

S. No	Statements	Mean	SD	Z value
1	I feel adequately involved in changes to my work environment	3.69	0.96	7.18***
2	My supervisor provides me with the necessary orientation concerning the merging process	3.51	1.12	4.54***
3	I miss my colleagues from the previous bank	3.42	1.07	3.94***
4	I feel out of place in the new Bank	3.33	1.12	2.95***
5	I experience frustration and stress from my attempts to adapt to the culture in the merged Bank	3.27	1.09	2.48**
6	There are things in my new work environment that I find surprising	3.42	1.06	3.98***
7	I feel nervous and uncomfortable when meeting individuals from the merged Bank	3.27	1.17	2.31**
8	I have a clear understanding of my role within the new Bank	3.46	1.09	4.23***
9	I feel welcome and respected by my new colleagues	3.74	0.93	7.97***
10	My suggestions / feedback are always received by my supervisors	3.48	1.23	3.89***
11	I look towards my professional future at the Bank in a positive way	3.80	0.93	8.58***
12	Feel good with the merged Bank	3.40	0.94	4.24***
13	Present Salary Structure at the Merged Bank is good	3.22	1.10	2.01**
14	I am happy at my Work place	3.42	1.18	3.55***

Source: Primary Data. ***Significant at 1% level.

6.4 Age and Perception

The perception of the employees before and after merging activities is compared among three different group by age. Table 6.4a and 6.4b presents the results.

Perception of employees during pre-merger and age

It can be seen from Table 6.4a that the mean values ranges between minimum 3.35 (for above 40 years age group against "I believe that the merger is the right way for the Bank to become market leader in India") and maximum 3.81(for above 40 years age group in respect of "I was nervous about my future when I heard about the merger"). The F values for all 5 statements are insignificant, in turn indicating there is no difference in opinion of all three age group about all the statements.

Table 6.4a
Perception of employees during pre-merger and age

S. No	Statements	Age (in Years)			F value
		Up to 30 (n=34)	31 - 40 (n=35)	Above 40 (n=31)	
1	I was nervous about my future when I heard about the merger	3.44 (1.05)	3.60 (0.95)	3.81 (0.98)	1.10
2	The communication from top management about the merger plans was assuring	3.68 (0.68)	3.63 (0.94)	3.61 (1.02)	0.05
3	I feel sufficiently informed about the process of the merger	3.59 (0.78)	3.37 (0.91)	3.58 (0.92)	0.68
4	I understand the objectives behind the merger	3.56 (0.96)	3.60 (0.85)	3.39 (1.15)	0.42
5	I believe that the merger is the right way for the Bank to become market leader in India	3.62 (1.02)	3.60 (0.91)	3.35 (0.80)	0.82

Source: Primary Data. Figures in brackets are standard deviation. All F values are insignificant

As the mean values for most of the age groups are above 3.50 and there is no significant difference in group means, it is concluded that the bank employees irrespective of their age level have positive attitude about "before merging activities" of the banks.

Table 6.4b

Perception of employees during post-merger and age

S. No	Statements	Age (in Years)			F value
		Up to 30 (n=34)	31 - 40 (n=35)	Above 40 (n=31)	
1	I feel adequately involved in changes to my work environment	3.91 (0.79)	3.49 (0.95)	3.68 (1.11)	1.72
2	My supervisor provides me with the necessary orientation concerning the merging process	3.50 (1.24)	3.69 (0.99)	3.32 (1.14)	0.86
3	I miss my colleagues from the previous bank	3.68 (0.98)	3.43 (1.17)	3.13 (0.99)	2.19
4	I feel out of place in the new Bank	3.26 (1.16)	3.37 (1.00)	3.35 (1.23)	0.09
5	I experience frustration and stress from my attempts to adapt to the culture in the merged Bank	3.32 (1.15)	3.20 (1.08)	3.29 (1.07)	0.12
6	There are things in my new work environment that I find surprising	3.32 (0.94)	3.43 (1.17)	3.52 (1.06)	0.27
7	I feel nervous and uncomfortable when meeting individuals from the merged Bank	3.06 (1.30)	3.14 (1.06)	3.65 (1.08)	2.42*
8	I have a clear understanding of my role within the new Bank	3.56 (1.02)	3.29 (1.18)	3.55 (1.06)	0.69
9	I feel welcome and respected by my new colleagues	3.91 (0.83)	3.71 (0.86)	3.58 (1.09)	1.05
10	My suggestions / feedback are always received by my supervisors	3.59 (1.18)	3.46 (1.17)	3.39 (1.38)	0.22
11	I look towards my professional future at the Bank in a positive way	4.03 (0.90)	3.74 (0.78)	3.61 (1.09)	1.75
12	Feel good with the merged Bank	3.41 (0.86)	3.29 (0.99)	3.52 (1.00)	0.49
13	Present Salary Structure at the Merged Bank is good	3.32 (0.91)	3.00 (1.21)	3.35 (1.14)	1.09
14	I am happy at my Work place	3.53 (1.24)	3.43 (1.12)	3.29 (1.22)	0.33

Source: Primary Data. Figures in brackets are standard deviation. *Significant at 10% level.

From the examination of the Table 6.4b pertaining to attitude of bank employees after merging activities across respondent groups by age, it is apparent that the mean perception vary from 3.06 to 4.03 for employee group with age up to 30 years, 3.00 to 3.74 for the group with age between 31-40 years and from 3.13 to 3.68 for the employee group aged above 40 years.

The F value is significant ($F = 2.42$, $p < 0.10$) at 10 per cent level for "I feel nervous and uncomfortable when meeting individuals from the merged Bank". Regarding above statement, the mean value is well above 3.50 for above 40 years age group, whereas it is near to "neutral" level for other two age group. This implies that the bank employees with age above 40 years tend to feel nervous and uncomfortable when meeting individuals from the merged Bank whereas it is no so for other younger age groups.

The employees of all age group neither agree nor disagree with "Present Salary Structure at the Merged Bank is good" as minimum score is 3.00 and F value is insignificant. Regarding other statements, the F values are insignificant and mean scores are above 3.50 for majority of the cases. Hence, it is found that the bank employees of all ages have felt positively about activities of the bank after takeover process except about "feeling nervous and uncomfortable when meeting individuals from the merged Bank" and "Present Salary Structure at the Merged Bank".

6.5. Gender and Perception

It is apparent from Table 6.5a that there is no any difference of opinion between male and female employees about pre-merger activities of their banks.

Moreover, the mean values are above 3.50 for most of the cases indicating that the number of agree opinion cases in both male and female groups are more. So, it may be concluded that both male and female employees tend to have positive attitude towards merging activities of their banks

Table 6.5a
Perception of employees during pre-merger and gender

S. No	Statements	Gender		t-value
		Male (n = 71)	Female (n = 29)	
1	I was nervous about my future when I heard about the merger	3.61 (0.96)	3.62 (1.08)	-0.07
2	The communication from top management about the merger plans was assuring	3.63 (0.81)	3.66 (1.04)	-0.11
3	I feel sufficiently informed about the process of the merger	3.54 (0.84)	3.45 (0.95)	0.45
4	I understand the objectives behind the merger	3.51 (0.92)	3.55 (1.12)	-0.21
5	I believe that the merger is the right way for the Bank to become market leader in India	3.56 (0.82)	3.45 (1.12)	0.57

Source: Primary Data. Figures in brackets are standard deviation. All F values are insignificant

Perception of employees during post-merger and gender

From Table 6.5b, it is understood that the minimum and maximum average score is 3.31 and 3.86 for male employee group and ranges between 2.86 and 3.69 for female employee group pertaining to the statements measuring attitude of the employees after merging activities

Table 6.5b

Perception of employees during post-merger and gender

S. No	Statements	Gender		t-value
		Male (n = 71)	Female (n = 29)	
1	I feel adequately involved in changes to my work environment	3.83 (0.91)	3.34 (1.01)	2.35**
2	My supervisor provides me with the necessary orientation concerning the merging process	3.54 (1.08)	3.45 (1.24)	0.35
3	I miss my colleagues from the previous bank	3.46 (1.03)	3.31 (1.17)	0.66
4	I feel out of place in the new Bank	3.35 (1.10)	3.28 (1.19)	0.31
5	I experience frustration and stress from my attempts to adapt to the culture in the merged Bank	3.37 (1.00)	3.03 (1.27)	1.39
6	There are things in my new work environment that I find surprising	3.51 (0.98)	3.21 (1.21)	1.29
7	I feel nervous and uncomfortable when meeting individuals from the merged Bank	3.44 (1.04)	2.86 (1.38)	2.27**
8	I have a clear understanding of my role within the new Bank	3.55 (0.92)	3.24 (1.41)	1.29
9	I feel welcome and respected by my new colleagues	3.76 (0.82)	3.69 (1.17)	0.35
10	My suggestions / feedback are always received by my supervisors	3.66 (1.11)	3.03 (1.43)	2.36**
11	I look towards my professional future at the Bank in a positive way	3.86 (0.83)	3.66 (1.14)	0.99
12	Feel good with the merged Bank	3.51 (0.88)	3.14 (1.06)	1.80*
13	Present Salary Structure at the Merged Bank is good	3.31 (1.08)	3.00 (1.13)	1.29
14	I am happy at my Work place	3.54 (1.05)	3.14 (1.43)	1.54

Source: Primary Data. Figures in brackets are standard deviation. *Significant at 10% level. **Significant at 5% level.

The male employees have agreed with Item 1 ("I feel adequately involved in changes to my work environment" - Mean = 3.83), Item 10 ("My suggestions / feedback are always received by my supervisors" - Mean = 3.66) and Item 12 ("Feel good with the merged Bank" - Mean = 3.51) and differ significantly from their female counterparts who are neutral with Item 1 (Mean = 3.34, t value = 2.35, $p < 0.05$), Item 10 (Mean = 3.03, t value = 2.36, $p < 0.05$) and Item 12 (Mean = 3.14, t value = 1.80, $p < 0.10$).

Regarding Item 7 ("I feel nervous and uncomfortable when meeting individuals from the merged Bank"), most of the male employees are found to be "neutral" (Mean = 3.44) and differ in their opinion from female employees majority of whom have disagreed (Mean = 2.86, t value = 2.27, $p < 0.05$).

In sum, from the entire inferences of the results comparing the opinion about after merging activities between male and female employees, it is found that the male and female employees have positive attitude towards "My supervisor provides me with the necessary orientation concerning the merging process", "I feel welcome and respected by my new colleagues", "I look towards my professional future at the Bank in a positive way" and both groups are found with neutral opinion about remaining aspects after merging activities.

6.6 Employee Status and Perception

Perception of employee during pre-merger and employee designation

When opinion of the respondents are compared by designation (clerks and officers), it is understood from the perusal of the Table 6.6a that both officers and clerks possess positive attitude towards all aspects before merging activities except Item 5 ("believing that the merger is the right way for the Bank to become market leader in India").

Table 6.6a
Perception of employee during pre-merger and employee designation

S. No	Statements	Designation		t-value
		Clerk (n = 50)	Officer (n = 50)	
1	I was nervous about my future when I heard about the merger	3.62 (1.07)	3.60 (0.93)	0.10
2	The communication from top management about the merger plans was assuring	3.60 (0.88)	3.68 (0.89)	-0.45
3	I feel sufficiently informed about the process of the merger	3.52 (0.74)	3.50 (0.99)	0.11
4	I understand the objectives behind the merger	3.54 (1.01)	3.50 (0.95)	0.20
5	I believe that the merger is the right way for the Bank to become market leader in India	3.32 (0.94)	3.74 (0.85)	-2.35**

Source: Primary Data. Figures in brackets are standard deviation. **Significant at 5% level.

Regarding statement against Item 5, officer possess positive attitude (Mean = 3.74) and differ from Clerk group who tend to be neutral with the above (Mean = 3.32) (t-value = -2.35, $p < 0.05$).

Table 6.6b

Perception of employee during post-merger and employee designation

S. No	Statements	Designation Clerk (n = 50)	Designation Officer (n = 50)	t-value
1	I feel adequately involved in changes to my work environment	3.74 (0.90)	3.64 (1.03)	0.52
2	My supervisor provides me with the necessary orientation concerning the merging process	3.44 (1.15)	3.58 (1.11)	-0.62
3	I miss my colleagues from the previous bank	3.54 (0.93)	3.30 (1.18)	1.13
4	I feel out of place in the new Bank	3.42 (1.21)	3.24 (1.02)	0.80
5	I experience frustration and stress from my attempts to adapt to the culture in the merged Bank	3.28 (1.07)	3.26 (1.12)	0.09
6	There are things in my new work environment that I find surprising	3.34 (1.02)	3.50 (1.09)	-0.76
7	I feel nervous and uncomfortable when meeting individuals from the merged Bank	3.02 (1.25)	3.52 (1.03)	-2.18**
8	I have a clear understanding of my role within the new Bank	3.38 (1.18)	3.54 (0.99)	-0.73
9	I feel welcome and respected by my new colleagues	3.74 (0.92)	3.74 (0.94)	0.00
10	My suggestions / feedback are always received by my supervisors	3.56 (1.21)	3.40 (1.26)	0.65
11	I look towards my professional future at the Bank in a positive way	3.84 (0.91)	3.76 (0.96)	0.43
12	Feel good with the merged Bank	3.28 (0.90)	3.52 (0.97)	-1.28
13	Present Salary Structure at the Merged Bank is good	3.24 (1.02)	3.20 (1.18)	0.18
14	I am happy at my Work place	3.46 (1.15)	3.38 (1.23)	0.34

Source: Primary Data. Figures in brackets are standard deviation.
*Significant at 10% level. **Significant at 5% level.

Perception of employee during post-merger and employee designation

Regarding attitude of the clerks and officers after merging activities of their banks, it can be seen from Table 6.6b that the clerks and officers tend to show positive attitude towards “I feel adequately involved in changes to my work environment” (Mean = 3.74 and 3.64 for clerks and officers), “I feel welcome and respected by my new colleagues” (Mean = 3.74 for both), “I look towards my professional future at the Bank in a positive way” (Mean = 3.84 and 3.76).

The officers have felt nervous and uncomfortable when meeting individuals from the merged Bank after merging activities whereas clerks have shown neither negative nor positive attitude towards it, and differ significant from each other in this regard (t value = -2.18, $p < 0.05$). With regard to other activities after merger, both clerks and officers tend to be neutral.

On the whole, from inferences of the results comparing opinion between clerks and officers regarding after merging activities, it is found that both groups differ in their attitude only in respect of “feeling nervous and uncomfortable when meeting individuals from the merged Bank”.

6.7. Marital Status and Perception

According to Table 6.7a, the bank employees, irrespective of their marital status possess similar attitude towards before merging activities. This is because, the t-value for the difference in mean perception scores are insignificant for all statements. So, it is deduced that the attitude of the bank employees with regard to before merging activities is independent of their marital status.

Table 6.7a
Perception of employees during pre-merger and marital status

S. No	Statements	Marital Status		t-value
		Married (n = 64)	Unmarried (n = 36)	
1	I was nervous about my future when I heard about the merger	3.53 (1.01)	3.75 (0.97)	-1.06
2	The communication from top management about the merger plans was assuring	3.56 (0.92)	3.78 (0.80)	-1.17
3	I feel sufficiently informed about the process of the merger	3.44 (0.87)	3.64 (0.87)	-1.11
4	I understand the objectives behind the merger	3.48 (0.93)	3.58 (1.08)	-0.48
5	I believe that the merger is the right way for the Bank to become market leader in India	3.48 (0.91)	3.61 (0.93)	-0.66

Source: Primary Data. Figures in brackets are standard deviation.
*Significant at 10% level. **Significant at 5% level.

Perception of employees during post-merger and marital status

From the examination of the Table 6.7b, it is evident that the level of positive attitude among unmarried group (Mean = 3.92) is significant higher than that of married group (Mean = 3.56) in respect of “I feel adequately involved in changes to my work environment” (t value = -1.79, $p < 0.10$). Similar scenario can be seen in the case of “I feel welcome and respected by my new colleagues” (t value = -2.38, $p < 0.05$).

Table 6.7b
Perception of employees during post-merger and marital status

S. No	Statements	Marital Status Married (n = 64)	Marital Status Unmarried (n = 36)	t-value
1	I feel adequately involved in changes to my work environment	3.56 (1.05)	3.92 (0.73)	-1.79*
2	My supervisor provides me with the necessary orientation concerning the merging process	3.56 (1.07)	3.42 (1.23)	0.62
3	I miss my colleagues from the previous bank	3.19 (1.04)	3.83 (1.00)	-3.03***
4	I feel out of place in the new Bank	3.38 (1.05)	3.25 (1.25)	0.53
5	I experience frustration and stress from my attempts to adapt to the culture in the merged Bank	3.23 (1.08)	3.33 (1.12)	-0.43
6	There are things in my new work environment that I find surprising	3.33 (1.07)	3.58 (1.02)	-1.16
7	I feel nervous and uncomfortable when meeting individuals from the merged Bank	3.44 (1.08)	2.97 (1.28)	1.93*
8	I have a clear understanding of my role within the new Bank	3.45 (1.08)	3.47 (1.11)	-0.08
9	I feel welcome and respected by my new colleagues	3.58 (0.94)	4.03 (0.84)	-2.38**
10	My suggestions / feedback are always received by my supervisors	3.39 (1.22)	3.64 (1.27)	-0.96
11	I look towards my professional future at the Bank in a positive way	3.73 (0.90)	3.92 (1.00)	-0.94
12	Feel good with the merged Bank	3.36 (1.01)	3.47 (0.81)	-0.57
13	Present Salary Structure at the Merged Bank is good	3.17 (1.20)	3.31 (0.89)	-0.58
14	I am happy at my Work place	3.41 (1.19)	3.44 (1.18)	-0.15

Source: Primary Data. Figures in brackets are standard deviation.

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level

Regarding “I miss my colleagues from the previous bank”, unmarried employees have been positive (Mean = 3.83) whereas the married employees are neither positive nor negative (Mean = 3.19) and both groups differ significantly (t value = -3.03, $p < 0.01$).

On the other hand, unmarried employees are neither positive nor negative while married employees are somewhat positive towards “I feel nervous and uncomfortable when meeting individuals from the merged Bank” and both groups differ significantly at 10 per cent level (t value = 1.93, $p < 0.10$). With regard to other activities after merger, majority of the married and unmarried bank employees tend to be neither positive nor negative and both groups are similar in expressing in their views.

From the entire above interpretation, it is found that positive attitudes towards “feeling adequately involved in changes to their work environment”, “missing their colleagues from the previous bank” and “feel welcome and respected by their new colleagues” is significantly more among unmarried bank employees than that of married bank employees, and both marital status groups tend to be similar in their attitude in respect of other after merging activities.

6.8. Educational Classification and Perception

From the comparison of attitude of the bank employees before merging activities by educational status, it is evident from Table 6.8a that the employees with below degree and degree qualification have been nervous about their future when heard about the merger (Mean = 4.00 & 3.59). The bank employees with degree and above degree qualification have felt that the communication from top management about the merger plans was assuring (Mean = 3.69 & 3.66) and these groups believe that the merger is the right way for the Bank to become market leader in India (Mean = 3.50 & 3.69).

Table 6.8a
Perception of employees during pre-merger and educational status

S. No	Statements	Educational Status			F value
		Below Degree (n=17)	Degree (n=54)	Above Degree (n=29)	
1	I was nervous about my future when I heard about the merger	4.00 (0.61)	3.59 (1.00)	3.41 (1.12)	1.92
2	The communication from top management about the merger plans was assuring	3.47 (0.62)	3.69 (0.77)	3.66 (1.17)	0.38
3	I feel sufficiently informed about the process of the merger	3.76 (0.90)	3.46 (0.75)	3.45 (1.06)	0.88
4	I understand the objectives behind the merger	3.35 (1.11)	3.48 (0.97)	3.69 (0.93)	0.72
5	I believe that the merger is the right way for the Bank to become market leader in India	3.35 (0.93)	3.50 (0.97)	3.69 (0.81)	0.79

Source: Primary Data. Figures in brackets are standard deviation. All F values are insignificant

However, from insignificant F values, it is understood that the opinion is similar for all educational groups. Hence, it is concluded that the attitude of bank employees before merging activities is independent of their educational status.

Table 6.8b
Perception of employees during post-merger and educational status

S. No	Statements	Educational Status			F value
		Below Degree (n=17)	Degree (n=54)	Above Degree (n=29)	
1	I feel adequately involved in changes to my work environment	3.59 (1.06)	3.72 (0.92)	3.69 (1.00)	0.12
2	My supervisor provides me with the necessary orientation concerning the merging process	3.53 (1.33)	3.46 (1.11)	3.59 (1.05)	0.11
3	I miss my colleagues from the previous bank	3.41 (0.80)	3.52 (1.13)	3.24 (1.09)	0.63
4	I feel out of place in the new Bank	3.59 (1.23)	3.41 (1.06)	3.03 (1.15)	1.61
5	I experience frustration and stress from my attempts to adapt to the culture in the merged Bank	3.47 (1.01)	3.31 (1.04)	3.07 (1.22)	0.82
6	There are things in my new work environment that I find surprising	3.06 (1.25)	3.43 (0.90)	3.62 (1.18)	1.54
7	I feel nervous and uncomfortable when meeting individuals from the merged Bank	3.29 (1.21)	3.24 (1.20)	3.31 (1.14)	0.04
8	I have a clear understanding of my role within the new Bank	3.47 (1.28)	3.30 (1.09)	3.76 (0.91)	1.73
9	I feel welcome and respected by my new colleagues	3.41 (1.12)	3.85 (0.79)	3.72 (1.03)	1.47
10	My suggestions / feedback are always received by my supervisors	3.88 (1.27)	3.56 (1.19)	3.10 (1.23)	2.42*
11	I look towards my professional future at the Bank in a positive way	3.53 (1.07)	3.87 (0.89)	3.83 (0.93)	0.88
12	Feel good with the merged Bank	3.18 (1.19)	3.39 (0.83)	3.55 (0.99)	0.85
13	Present Salary Structure at the Merged Bank is good	3.35 (1.17)	3.26 (1.05)	3.07 (1.16)	0.43
14	I am happy at my Work place	3.35 (1.06)	3.46 (1.24)	3.38 (1.18)	0.08

Source: Primary Data. Figures in brackets are standard deviation. *Significant at 10% level.

From **Table 6.8b,** the mean perception scores ranged between 3.06 and 3.88 for the employee group with "below degree" qualification, 3.24 and 3.87 for degree qualified, and between 3.03 and 3.83 for the group with education level "above degree". The F values are insignificant for all aspects of "after merging activities" except for "My suggestions / feedback are always received by my supervisors" (F value = 2.42, $p < 0.10$). Regarding above statement, the bank employees with "above degree" qualification have been "neutral" whereas those with "below degree" and "degree" qualification have perceived positively. Otherwise, the bank employees irrespective of their educational status are found with similar attitude towards various aspects of "after merging activities"

6.9. Job Experience and Perception

Table 6.9a
Perception of employees during pre-merger and job experience

S. No	Statements	Job Experience (in Years)			F value
		Up to 5 (n=37)	6 – 15 (n=41)	Above 15 (n=22)	
1	I was nervous about my future when I heard about the merger	3.51 (1.07)	3.61 (0.92)	3.77 (1.02)	0.46
2	The communication from top management about the merger plans was assuring	3.84 (0.65)	3.49 (1.00)	3.59 (0.96)	1.59
3	I feel sufficiently informed about the process of the merger	3.62 (0.72)	3.41 (0.97)	3.50 (0.91)	0.55
4	I understand the objectives behind the merger	3.65 (0.89)	3.63 (0.86)	3.09 (1.23)	2.81*
5	I believe that the merger is the right way for the Bank to become market leader in India	3.65 (0.98)	3.46 (0.92)	3.45 (0.80)	0.49

Source: Primary Data. Figures in brackets are standard deviation. *Significant at 10% level

As per **Table 6.9a,** the bank employees with experience up to 5 years, between 6-15 years and above 15 years tend to show positive attitude towards all aspects of before merging activities except "I understand the objectives behind the merger" against which the employees with above 15 years of experience have neither negative or positive attitude. Further, the attitude of the employees with above 15 years of experience differ significantly from that of those with other job experience in respect of above aspects (item 4) (F value = 2.81, $p < 0.10$). In sum, it may be concluded that the bank employees irrespective of their experience in their job tend to show positive attitude towards various aspects before merging activities.

Perception of employees during post-merger and job experience

From Table 6.9b, it can be seen that the bank employee group with years of experience between 6-15 years have neither disagreed nor agreed (Mean = 3.39) with "I feel adequately involved in changes to my work environment" and differ significantly in their opinion from that of other two employee groups (F value = 3.69, $p < 0.05$). The employee group with experience up to 5 years (Mean = 3.84) have felt missing their colleagues from the previous bank and differ from those with experience between 6-15 years (Mean = 3.29) and above 15 years (Mean = 2.95) (F value = 5.74, $p < 0.01$). Similarly, the employee group with experience above 15 years (Mean = 3.82) have felt nervous and uncomfortable when meeting individuals from the merged Bank and differ significantly (F value=3.23, $p < 0.05$) from employee groups with experience up to 5 years and between 6-15 years, who have been "neutral".

Found that there is significant difference in attitude among bank employees in respect of "feeling adequately involved in changes to work environment", "missing my colleagues from the previous bank" and "feeling nervous and uncomfortable when meeting individuals from the merged Bank" after merging activities.

Table 6.9b
Perception of employees during post-merger and job experience

S. No	Statements	Job Experience (in Years) Up to 5 (n=37)	6 – 15 (n=41)	Above 15 (n=22)	F value
1	I feel adequately involved in changes to my work environment	3.95 (0.81)	3.39 (1.00)	3.82 (1.01)	3.69**
2	My supervisor provides me with the necessary orientation concerning the merging process	3.51 (1.24)	3.51 (1.03)	3.50 (1.14)	0.00
3	I miss my colleagues from the previous bank	3.84 (0.96)	3.29 (1.03)	2.95 (1.09)	5.74***
4	I feel out of place in the new Bank	3.19 (1.08)	3.44 (1.05)	3.36 (1.33)	0.49
5	I experience frustration and stress from my attempts to adapt to the culture in the merged Bank	3.38 (1.11)	3.20 (1.01)	3.23 (1.23)	0.29
6	There are things in my new work environment that I find surprising	3.46 (1.02)	3.34 (1.09)	3.50 (1.10)	0.20
7	I feel nervous and uncomfortable when meeting individuals from the merged Bank	3.11 (1.20)	3.12 (1.12)	3.82 (1.10)	3.23**
8	I have a clear understanding of my role within the new Bank	3.43 (1.04)	3.44 (1.21)	3.55 (0.96)	0.09
9	I feel welcome and respected by my new colleagues	3.84 (0.83)	3.71 (1.05)	3.64 (0.85)	0.36
10	My suggestions / feedback are always received by my supervisors	3.57 (1.19)	3.46 (1.21)	3.36 (1.40)	0.19
11	I look towards my professional future at the Bank in a positive way	3.97 (0.93)	3.76 (0.80)	3.59 (1.14)	1.24
12	Feel good with the merged Bank	3.41 (0.83)	3.24 (0.99)	3.68 (0.99)	1.56
13	Present Salary Structure at the Merged Bank is good	3.35 (0.95)	3.05 (1.14)	3.32 (1.25)	0.85
14	I am happy at my Work place	3.49 (1.22)	3.46 (1.07)	3.23 (1.34)	0.37

Source: Primary Data. Figures in brackets are standard deviation. **Significant at 5% level. ***Significant at 1% level

Regarding other aspects, the attitude of the bank employees is similar irrespective of their business experience. From the entire above inferences, it is

6.10. Annual Income and Perception

Table 6.10a
Perception of employees during pre-merger and annual income

S. No	Statements	Annual Income			F value
		Up to Rs.150000 (n=39)	Rs.150000-500000 (n=44)	Above Rs.500000 (n=17)	
1	I was nervous about my future when I heard about the merger	3.62 (0.96)	3.55 (1.02)	3.76 (1.03)	0.30
2	The communication from top management about the merger plans was assuring	3.59 (0.68)	3.61 (0.97)	3.82 (1.07)	0.45
3	I feel sufficiently informed about the process of the merger	3.59 (0.79)	3.36 (0.87)	3.71 (1.05)	1.22
4	I understand the objectives behind the merger	3.62 (0.91)	3.64 (0.92)	3.00 (1.17)	3.01**
5	I believe that the merger is the right way for the Bank to become market leader in India	3.74 (0.88)	3.43 (0.95)	3.29 (0.85)	1.91

Source: Primary Data.Figures in brackets are standard deviation. **Significant at 5% level.

According to Table 6.10a, the bank employee groups with all levels of annual income have positive attitude towards various aspects before merging activities except “understanding the objectives behind the merger”. With regard to understanding the objective behind the merger, the employee group with annual income above Rs.500000 have not reacted either positively or negatively and differ significantly from other two income groups (F value = 3.01, $p < 0.05$). Overall, it is concluded that the bank employees of all income levels have positive attitude towards “before merging activities” except understanding the objectives behind the merger among high income group.

From Table 6.10b, it can be seen that the mean level of perception among the bank employee group with annual income up to Rs.150000 is above 3.50 against items 1 (Mean = 3.85), 2 (Mean = 3.67), 3 (Mean = 3.67), 9 (Mean = 3.79), 10 (Mean = 3.64), 11 (Mean = 4.00) and 14 (Mean = 3.56) whereas it is above 3 but below 3.50 against remaining items. The mean value for employee group with annual income between Rs.150000 and Rs.500000 is 3.50 and above against item 1 (Mean = 3.61), 8 (Mean = 3.50), 9 (Mean=3.66), 11 (Mean = 3.86), and 12 (Mean=3.57).

Similarly, the mean perception score for employee group with annual income above Rs.500000 is 3.50 and above in respect of items 1 (Mean = 3.53), 2 (Mean = 3.53), 9 (Mean = 3.82) and 10 (Mean = 3.53). In respect of Item 11, that is, “looking towards professional future at the Bank in a positive way”, the high income group tend to show neutral attitude and differ from other two low income groups (F value = 5.21, $p < 0.01$), who have been positive. Irrespective of income levels, the employees have felt adequately involved in changes to their work environment and expressed as “looking towards professional future at the bank in a positive way” after merging activities. It is therefore deduced that perception during post-merger is independent of their income level.

Table 6.10b
Perception of employees during post-merger and annual income

S. No	Statements	Annual Income			F value
		Up to Rs.150000	Rs.150000-500000	Above Rs.500000	
		(n=39)	(n=44)	(n=17)	
1	I feel adequately involved in changes to my work environment	3.85	3.61	3.53	0.89
		(0.93)	(0.99)	(0.94)	
2	My supervisor provides me with the necessary orientation concerning the merging process	3.67	3.36	3.53	0.75
		(1.11)	(1.18)	(1.01)	
3	I miss my colleagues from the previous bank	3.67	3.18	3.47	2.22
		(0.87)	(1.21)	(1.01)	
4	I feel out of place in the new Bank	3.46	3.18	3.41	0.70
		(1.07)	(1.08)	(1.33)	
5	I experience frustration and stress from my attempts to adapt to the culture in the merged Bank	3.38	3.36	2.76	2.26
		(1.02)	(1.10)	(1.15)	
6	There are things in my new work environment that I find surprising	3.44	3.39	3.47	0.05
		(1.14)	(1.02)	(1.01)	
7	I feel nervous and uncomfortable when meeting individuals from the merged Bank	3.08	3.45	3.24	1.09
		(1.29)	(1.07)	(1.15)	
8	I have a clear understanding of my role within the new Bank	3.41	3.50	3.47	0.07
		(1.09)	(1.13)	(1.01)	
9	I feel welcome and respected by my new colleagues	3.79	3.66	3.82	0.30
		(1.03)	(0.78)	(1.07)	
10	My suggestions / feedback are always received by my supervisors	3.64	3.32	3.53	0.72
		(1.18)	(1.16)	(1.55)	
11	I look towards my professional future at the Bank in a positive way	4.00	3.86	3.18	5.21***
		(0.89)	(0.85)	(1.01)	
12	Feel good with the merged Bank	3.26	3.57	3.29	1.27
		(0.88)	(1.00)	(0.92)	
13	Present Salary Structure at the Merged Bank is good	3.33	3.09	3.29	0.55
		(1.06)	(1.10)	(1.21)	
14	I am happy at my Work place	3.56	3.32	3.35	0.48
		(1.21)	(1.14)	(1.27)	

Source: Primary Data.Figures in brackets are standard deviation. ***Significant at 1% level

6.11 Employee Groups from Joint and Nuclear Employees and Perception

Table 6.11a
Perception of employees during pre-merger and family type

S. No	Statements	Family Type		t-value
		Joint (n = 55)	Nuclear (n = 45)	
1	I was nervous about my future when I heard about the merger	3.71 (0.98)	3.49 (1.01)	1.10
2	The communication from top management about the merger plans was assuring	3.75 (0.78)	3.51 (0.99)	1.33
3	I feel sufficiently informed about the process of the merger	3.42 (0.79)	3.62 (0.96)	-1.17
4	I understand the objectives behind the merger	3.47 (0.86)	3.58 (1.12)	-0.53
5	I believe that the merger is the right way for the Bank to become market leader in India	3.51 (0.96)	3.56 (0.87)	-0.25

Source: Primary Data. Figures in brackets are standard deviation.

It can be observed from Table 6.11a, the attitude of bank employees before merging activities is similar and positive between joint and nuclear family groups as F values is insignificant and most of the mean perception scores are more than 3.50. Hence, it is found that the bank employees' positive attitude before merging activities is independent of their family type.

Perception of employees during post-merger and family type

From the perusal of the Table 6.11b, it is understood that the level of attitude is positive among bank employees from both joint and nuclear families in

Table 6.11b
Perception of employees during post-merger and family type

S. No	Statements	Family Type		t-value
		Joint (n = 55)	Nuclear (n = 45)	
1	I feel adequately involved in changes to my work environment	3.69 (0.96)	3.69 (0.97)	0.01
2	My supervisor provides me with the necessary orientation concerning the merging process	3.65 (1.17)	3.33 (1.04)	1.43
3	I miss my colleagues from the previous bank	3.47 (1.10)	3.36 (1.03)	0.55
4	I feel out of place in the new Bank	3.20 (1.11)	3.49 (1.12)	-1.29
5	I experience frustration and stress from my attempts to adapt to the culture in the merged Bank	2.96 (1.04)	3.64 (1.05)	-3.25***
6	There are things in my new work environment that I find surprising	3.35 (1.14)	3.51 (0.94)	-0.78
7	I feel nervous and uncomfortable when meeting individuals from the merged Bank	3.22 (1.20)	3.33 (1.15)	-0.49
8	I have a clear understanding of my role within the new Bank	3.31 (1.12)	3.64 (1.03)	-1.55
9	I feel welcome and respected by my new colleagues	3.67 (0.98)	3.82 (0.86)	-0.80
10	My suggestions / feedback are always received by my supervisors	3.40 (1.24)	3.58 (1.23)	-0.71
11	I look towards my professional future at the Bank in a positive way	3.71 (0.99)	3.91 (0.85)	-1.08
12	Feel good with the merged Bank	3.29 (0.92)	3.53 (0.97)	-1.28
13	Present Salary Structure at the Merged Bank is good	3.15 (1.15)	3.31 (1.04)	-0.75
14	I am happy at my Work place	3.25 (1.27)	3.62 (1.05)	-1.56

Source: Primary Data. Figures in brackets are standard deviation. ***Significant at 1% level respect of "after merging activities" such as "feel adequately involved in changes to work environment", "feel welcome and respected by new colleagues" and "look towards professional future at the Bank in a positive way" as the mean scores are above 3.50 in all the cases.

On the other hand, the level of attitude is neither positive nor negative among bank employees belong to joint and nuclear families with regard to "miss my colleagues from the previous bank", "feel out of place in the new Bank", "feel nervous and uncomfortable when meeting individuals from the merged Bank" and "Present Salary Structure at the Merged Bank is good". However, only in respect of "I experience frustration and stress from my attempts to adapt to the culture in the merged Bank", there is significant difference in the level of attitude between joint (Mean = 2.96) and nuclear (Mean = 3.64) family groups (t value = -3.25, $p < 0.01$). On the whole, from the entire above inferences, it is found that the level of attitude towards most of the after merging activities is independent of the family type of bank employees.

6.12. Public and Private Sector Bank Employees and Perception

Table 6.12a shows the mean opinion level as well as t-test results comparing the mean opinion between public and private sector bank employees pertaining to various aspects of before merging activities.

It can be observed from table that the private sector bank employees (Mean = 3.00) neither nervous nor relaxed about their future when they heard about the merger differ significantly from public sector bank employees (Mean = 3.77), who are nervous (F value = 3.32, $p < 0.01$). Similarly, the attitude of private sector bank employees towards "communication from top management about the merger plans was assuring" (Mean = 3.33) is neither positive nor negative and differ in their view from public sector employees (Mean = 3.72). who have agreed with the above (F value = 1.81, $p < 0.10$). Regarding other before merging activities, there is no difference of opinion between public and private sector bank employees.

Table 6.12a
Perception of employees during pre-merger and bank type

S. No	Statements	Banking Sector		t-value
		Public (n = 79)	Private (n = 21)	
1	I was nervous about my future when I heard about the merger	3.77 (0.93)	3.00 (1.00)	3.32***
2	The communication from top management about the merger plans was assuring	3.72 (0.86)	3.33 (0.91)	1.81*
3	I feel sufficiently informed about the process of the merger	3.54 (0.89)	3.38 (0.80)	0.76
4	I understand the objectives behind the merger	3.48 (1.04)	3.67 (0.73)	-0.77
5	I believe that the merger is the right way for the Bank to become market leader in India	3.52 (0.95)	3.57 (0.81)	-0.23

Source: Primary Data. Figures in brackets are standard deviation.

Table 6.12b
Perception of employees during post-merger and bank type

S. No	Statements	Banking Sector Public (n = 79)	Banking Sector Private (n = 21)	t-value
1	I feel adequately involved in changes to my work environment	3.65 (1.05)	3.86 (0.48)	-0.90
2	My supervisor provides me with the necessary orientation concerning the merging process	3.61 (1.14)	3.14 (1.01)	1.70*
3	I miss my colleagues from the previous bank	3.39 (1.09)	3.52 (0.98)	-0.50
4	I feel out of place in the new Bank	3.43 (1.12)	2.95 (1.07)	1.76*
5	I experience frustration and stress from my attempts to adapt to the culture in the merged Bank	3.32 (1.12)	3.10 (1.00)	0.82
6	There are things in my new work environment that I find surprising	3.47 (1.06)	3.24 (1.04)	0.89
7	I feel nervous and uncomfortable when meeting individuals from the merged Bank	3.35 (1.17)	2.95 (1.16)	1.41
8	I have a clear understanding of my role within the new Bank	3.34 (1.15)	3.90 (0.62)	-2.15**
9	I feel welcome and respected by my new colleagues	3.71 (1.00)	3.86 (0.57)	-0.65
10	My suggestions / feedback are always received by my supervisors	3.46 (1.33)	3.57 (0.81)	-0.38
11	I look towards my professional future at the Bank in a positive way	3.84 (0.98)	3.67 (0.73)	0.74
12	Feel good with the merged Bank	3.43 (1.00)	3.29 (0.72)	0.62
13	Present Salary Structure at the Merged Bank is good	3.24 (1.13)	3.14 (0.96)	0.36
14	I am happy at my Work place	3.32 (1.23)	3.81 (0.93)	-1.72*

Source: Primary Data. Figures in brackets are standard deviation. ***Significant at 1% level

Perusal of the Table 6.12b reveals that the level of attitude of public sector employees is significantly higher than that of private sector employees in respect of “My supervisor provides me with the necessary orientation concerning the merging process” (Mean = 3.61 for public sector bank employees and 3.14 for private sector bank employees; t-value = 1.70, $p < 0.10$) and “I feel out of place in the new Bank” (Mean = 3.43 for public and 2.95 for private sector bank employees; t-value = 1.76, $p < 0.10$). On the other hand, the level of attitude of private sector bank employees is significantly higher than that of those in the public sector banks with regard to “I have a clear understanding of my role within the new Bank” (Mean = 3.90 for private and 3.34 for public sector bank employees; t-value = -2.15, $p < 0.05$) and “I am happy at my Work place” (Mean = 3.81 for private and 3.32 for public sector bank employees; t-value = -1.72, $p < 0.10$). Regarding other aspects due to after merging activities, the level of attitude remains same between public and private sector banks employees. As the attitude of the public and private sector bank employees “after merging activities” is similar towards most of the aspects, it is deduced that there is no significant difference in the level of attitude between public and private sector bank employees “after merging activities”.

Test of Hypothesis: 6

Ho: There is no difference in the perception of employees on the pre- merger activities and post-merger activities

H1: There is difference in the perception of employees on the pre- merger activities and post-merger activities

Conclusion: Reject Null Hypothesis because there is difference in the perception of employees on the pre- merger activities and post-merger activities

Test of Hypothesis: 7

Ho: There is no difference in the perception (mean score) of employees of public and private sector banks)

H1: There is difference in the perception (mean score) of employees of public and private sector banks)

Conclusion: Reject Null Hypothesis because there is difference in the perception (mean score) of employees of public and private sector banks

Conclusion

In a nut shell, this chapter reveals that the perception of public and private sector banks employees towards "before merging activities" and "after merging activities" is independent of their demographic characteristics. It is, also found that the bank employees were "nervous about their future when they heard about the merger" before merging activities. However, they have felt that "The communication from top management about the merger plans was assuring", "sufficiently informed about the process of the merger", "understood the objectives behind the merger" and "believed that the merger was the right way for the Bank to become market leader in India". Further, it is concluded that the bank employees "after merging activities" have felt adequately involved in changes to their work environment, welcome and respected by their new colleagues and looked towards their professional future at the Bank in a positive way. They have also agreed that their supervisor provided them with the necessary orientation concerning the merging process "after merging activities".

CHAPTER VII

SUMMARY OF THE STUDY, FINDINGS, SUGGESTIONS AND CONCLUSION

Mergers and acquisitions are regarded today as the most popular strategy among firms to establish a competitive advantage over their rivals. There are various reasons behind firms going for mergers and acquisitions.

1.1 Summary of the Study

In **chapter I**, the background of the study is introduced with the need and significance of the study, research methodology explained in terms of study design, data collection technique and data analysis. A brief summary of the chapter is presented.

Economic liberalization today has created a sense of urgency among companies resulting in acute significance of examining the effect of corporate restructuring and change initiatives on the organizational performances. Existing literature on the M&A activity among merged banks reveals certain lack of empirical research in India with regard to the impact of M & A on the banking companies both on a long term and short term basis. Furthermore, the study on the application of CAMELS rating of merged banks in India has not been made so far. Hence this work has reviewed and analyzed the performance of merged banks using CAMELS ratings.

In addition, today, more than ever, employees are regarded as the greatest assets for any organization and therefore, the perception of the employees on any organizational initiatives is important and crucial. This is because of the fact that when employees feel that the changes aroused out of M&A activity may breach their psychological mindset which may inadvertently affect the reputation of the firm among its employees and consequently resulting in reduced performance. No empirical study has been made so far on the perception of the employees about the M&A activity in the Indian Banking Industry, it is therefore significant enough to undertake study on the factors influencing the perceptions of the employees about the M&A process undertaken by their organization. This attempt would invariably be a source of information for the managers and business leaders of any merging organization to understand the relative significance of the process and the resultant impact of it on employees, performance, profitability and organizational sustainability as a whole.

Methodology of the Study

This empirical study was undertaken to analyze the performance of the merger banks that had gone for structural change during the post financial sector reform period in India. A comprehensive analysis comprising on three dimensions were undertaken to meet the objectives of this empirical study. Based on availability of relevant secondary data from the CMIE database pertaining to the operating performance, share price and market index, and the employee & perceptions, the researcher has confined his study only to 8 merged banks for the final analysis, discussion and inferences. Since the post merger performance of the merged banks was analyzed, the researcher has restructured the selection of merged banks upto 2004-05. In addition, a well structured questionnaire was prepared to measure the perceptions of the employees of the merged banks. The interview schedule consisted of two sections such as job demographic details and 14 statements measuring the perception of employees in a 5-point Likert scale.

Data Collection

Firstly, performance of the merged banks was extracted for 3 year before and after (Short run performance) as well as 5 year before and after (long run performance). Secondly, data on the share price and market index were extracted. Both these extraction were done from the prowess database of Centre for Monitoring Indian Economy (CMIE). Finally, the questionnaire was distributed to 124 employees, who have been working with 8 merged banks during pre and post merger period in the UT of Pondicherry from among a total of 248 employees. Upon completion of data collection, 100 filled in responses were found completed properly. Quota sampling technique was employed. The collected data was subsequently entered into SPSS for data analysis and conclusion generation.

Scheme of Data Analysis

First, pre and post-merger operating performance ratios of the selected merged banks were computed and compared for trends and patterns for both short term (3 years) and long term intervals (5 years) using parametric t-test. Second, the impact of merger and acquisition on shareholders' wealth as well as on firm performance was analyzed using share price data and financial statements of the select public and private sector banks based on Abnormal Return (AR) and Cumulative Abnormal Returns (CAR) arrived at using Market Model (MM) and Market Adjusted Model (MAM). Finally, the primary data on the perception of bank employees about “before merger” and “after merger” activities were subjected to descriptive analysis first (Mean and Standard deviation). The mean level of attitude of the respondents is compared across groups by socio-economic characteristics using t-test and one way ANOVA (F test).

An extensive review of literature from books, journals, published paper etc., carried out for the purpose of study is presented in this **chapter II.** This is aimed at enhancing the present level of understanding in the area of mergers and acquisitions in the national and international scenario, gain insights into the success/failure of mergers and to identify problem for the purpose of this research study. The brief summary of the chapter is presented.

Mergers and acquisitions is an area of immense research potentials to both academicians and practicing managers for over three decades. There have been numerous studies on mergers and acquisitions abroad, in the last four decades. From the review of literature, it is observed that Indian industry has witnessed a spurt in the number of corporate restructuring exercises particularly in the post- liberalization period. The possible reasons for restructuring of business and models by the Indian corporate includes; increasing competition both globally and domestically, improve the core competencies, debt equity restructuring to reduce high interest obligations, to cope up with the funds constraints or utilization of excess funds, reduce time over-run costs, downsizing and reducing the number of organizational layers for increasing the operational efficiency, growth and entry into new markets, for corporate tax benefits, automatic approval for FDI in companies, new industrial licensing policy or government policy decisions, to enhance shareholders value or to improve the share prices of the company, etc. From the existing literature, it was observed that major studies focused on performance and the resultant implications of M&A.

The **chapter III** presents the theoretical base of the study. A brief summary of the chapter is presented.

As corporate world experienced the spurt of merger and acquisition activities in the 1990s, it was regarded as an initiative exploiting emerging opportunities presented by globalization. Incidentally, the banking industry worldwide also has been consolidating through successive mergers and acquisitions. Given the developments, banks also faced liquidity problems due to sub-prime crisis. These problems have made financial institutions cautious about voluntary mergers and acquisitions of late. The complexity that any merger activity brings therefore results in acute interests and attention from practitioners as well as from theorists in several fields, such as financial economics, strategic management, and organization theory. This study was an attempt to define a framework for understanding mergers and acquisitions and resulting performance of banking industry as well as those challenges that surfaces the management for making it a successful one. This very situation undermines the significance of merger on firms in this context.

7.2 Findings of the Study

Pre and post merger performance of selected merged banks

<u>Liquidity Position</u>

Current Ratio

There have been significant improvement in CR during 3 year in post period from its 3 year pre period level due to OBC's acquisition of Punjab Cooperative Bank as well as Bari Doab Bank Ltd) and State Bank of India's (SBI) acquisition of Kashinath Seth Bank.

With regard to acquisition activities of BOB (Barelly Corporation Bank), OBC (Nedungadi Bank Ltd) and PNB, the 5 year mean CR remains same between pre and post period, indicating no improvement in the period of 5 year after acquisition activities.

Quick Ratio (QR)

Similarly, the 3-year mean QR of SBI has increased significantly from 1.2333 times in pre period to 1.84 times in post period ($t = -6.22$, $p < 0.01$).

On the other hand, there have been significant decline in 3-year QR of ICICI bank between pre and post period for its takeover of Bank of Madura. With regard to takeover activities of BOB (Barelly Corporation Bank), HDFC, OBC (Global Trust Bank) and PNB, there is no any remarkable change in 3 year QR between two periods.

Also, there have been significant decline in QR of HDFC against its acquisition of Times Banks from 4.4620 times in pre period to 1.0540 times in post period ($t = 3.49$, $p < 0.01$). At the same time, the change in 5-year QR of SBI between pre and post period against its acquisition activity is positive and significant at 1 per cent level ($t = -3.39$, $p < 0.01$).

Cash Asset Ratio

The 3-year CARAT is almost similar between two periods in the case of acquisition activities of OBC (GTB) and PNB. At the same time, 3-year CARAT, 3.5937 times and 5.2385 times in pre event period, have significantly declined to 1.7962 times and 1.0017 times in post event period for BOB (Banaras Bank Ltd) (t value = 3.10, $p < 0.10$) and ICICI Bank (t value = 6.24, $p < 0.01$). At the same time, there have been a marginal improvements in 3-year CARAT of OBC (Punjab Co-op / Bari Doab Bank) (t value = -2.45, $p < 0.10$ for OBC) and SBI (t value = -2.40, $p < 0.10$ for SBI) between pre and post event period due to their takeover activities.

The change in 5-year CARAT is significant and negative for acquisition activities of BOB with Banaras State Bank Ltd (t value = 1.97, $p < 0.10$), HDFC bank with Times Bank (t value = 3.68, $p < 0.01$), ICICI Bank with Bank of Madura (t value = 2.55, $p < 0.05$) and OBC with Global Trust Bank (t value = 1.90, $p < 0.10$). On the other hand, the change in 5-year CARAT is significant and positive for takeover of Kashinath Seth Bank by State Bank India (t value = -4.48, $p < 0.01$).

Activity ratio

Working Capital Turnover Ratio

It is found that the acquiring Banaras State Bank tend to reduce the efficiency of the Bank of Baroda in respect to using working capital properly for generating income whereas the SBI's acquiring process increased its efficiency in term of turning working capital into earnings.

The decline in WCTR during 5-year post-period is significant at 1 per cent level of BOB (t-value = 3.84, $p < 0.01$) and HDFC (t-value = 3.29, $p < 0.01$). Similarly, increase in WCTR from 5-year pre period to post-period is significant at 1 per cent level for SBI (t-value = -3.58, $p < 0.01$)

Asset Turnover Ratio

ATR has increased to 0.1087 times in 3 year during post-period from 0.1071 times in 3 year during pre-period for Oriental Bank of Commerce against its acquisition of Punjab Co-operative Bank and Bari Doab Bank Ltd. The difference in ATR between two periods is significant at 10 per cent level (t-value = -2.43, $p < 0.10$). That is, efficiency in terms of converting their assets into earnings has declined after acquisition activities for most of the banks.

However, 5-year ATR for HDFC bank experienced decline and an increase for OBC. For Punjab Co-operative Bank and Bari Doab Bank Ltd is not significant statistically (which is significant for 3 year ATR). Hence, it is concluded that the efficiency in ATR for longer period is not as same as that of shorter period against banks' acquisition event

Fixed Asset Turnover Ratio

For the acquisition deals of banks other than mentioned above, there is no any remarkable difference in the FATR between pre and post period of 3 year

However, increases in 5-year FATR from 8.8531 times during pre-period to 10.6244 during post-period have been insignificant in the PNB's acquisition deal with Nedungadi Bank Limited. That is, when the FATR is compared for longer period, the effects of acquisition become trivial for PNB.

Profitability Ratios

Gross Profit Margin

The short-term effect on GPM is negative (decline in GPM) for HDFC, ICICI and PNB whereas it is positive for OBC (Punjab Co-operative Bank and Bari Doab Bank Ltd) and SBI due to their acquisition of other banks.

It is apparent from the above results that the difference in GPM between pre and post period, which is insignificant for BOB's deal with Banaras State Bank in shorter time period of 3 year, has become significant for longer time period of 5 year. The above scenario has been reverse for ICICI and PNB banks.

Operating Profit Margin

Alternatively, the 3-year OPM tends to increase significantly from 0.6796 times and 0.6006 times in pre-period to 0.7688 times and 0.6740 times in post-period against acquisition deal of OBC with Punjab Co-operative Bank and Bari Doab Bank Ltd (t-value = -.5.71, $p < 0.01$) and SBI with Kashinath Seth Bank (t-value = -5.24, $p < 0.01$) respectively.

That is, when considered for longer time duration, the acquisition deals of majority of the banks do not tend to make any changes in their profitability when measured in terms of operating profit margin.

Net Profit Margin

Only for HDFC there have been significant decline in NPM due to its deal acquiring Times Bank Ltd (Mean = 0.2012 in pre declined to 0.1491 in post period and t-value = 6.06, $p < 0.01$). For other banks, NPM, on an average for 3 year, remains same and is not affected by the acquisition activities.

In respect of BOB acquiring Barelly Corporation, NPM, on an average for 5 year, 5.45 per cent in pre period has increased to 8.59 per cent in post-period. The t-value of -1.82, though insignificant, is not trivial. So, it can be concluded that for longer time period also, the acquisition activity of BOB, PNB and SBI has impact on their left-over earnings.

Return on Net Worth

The 3 year mean RONW seems to be remains same between two periods in respect of BOB with Barelly Corporation, HDFC with Times Bank, OBC with Punjab Co-op Bank / Bari Doab Bank Ltd, PNB with Nedungadi Bank and SBI with Kashinath Seth Bank as obtained t-values for the difference in 3 year mean RONW between pre and post even periods are very trivial. On the whole, it is concluded that there is neither decline nor increase in the return on net worth due to takeover deals of public and private sector banks.

The decline in 5 year RONW can also be seen from pre to post event period for ICICI Bank's takeover of Bank of Madura, but the decline is not significant (t value = 1.67, $p > 0.10$, insignificant). Regarding 5 year RONW in pre and post event periods for other remaining banks' takeover activities (BOB with Banaras SB, HDFC, OBC with Pun Co-op/Bari, PNB, SBI), the change in it is almost zero (t values are trivial).

Return on Capital Employed (ROCE)

There seems to be an increase in 3 year ROCE from pre to post event period for SBI's acquisition activity. But the above positive change is not at mentionable level (t value = -2.06, $p > 0.10$). In respect of other banks' acquisition activities, the difference in 3 year ROCE between pre and post acquisition periods is trivial as t-values for the difference in mean values between periods are very small.

At the same time, the acquisition activities of BOB with Banaras State Bank, HDFC with Times Bank, OBC with Punjab Co-operative Bank / Bari Doab Bank and PNB with Nedungadi Bank do not have any impact on ROCE.

Public Sector Banks

It is found that there is notable change in liquidity position of the public sector banks due to their acquisition activities whereas there have been significant decline in their activities of turning their assets for generating income. It is however found that the net earnings of public sector banks in shorter-time periods of have increased significantly after acquiring other banks.

On the whole, it is concluded that the performance of public sector banks in terms of generating income relative to their investment in fixed assets is significantly and negatively affected whereas their performance in respect of their net earnings is positively influenced by acquisition deals.

Private Banks

It may be concluded that the financial performance of private sector banks during shorter time period of 3 year become poor after their acquisition deals.

Hence, from the results comparing the liquidity, activity and profitability ratios, on an average for 3-year (shorter time period) and 5-year (longer time period) between pre and post-acquisition period, it is found that the deals pertaining to acquiring other banks by private sector banks have significant negative effect on their liquidity position as well as on their overall financial performance.

All Sector Banks

The study shows that there have been significant decline in liquidity position of both public and private sector banks together due to their activities pertaining to acquiring private limited banks. Similarly, the efficiency of both public and private sector banks together (all sector banks) have declined at remarkable level after their acquisition deals.

Regarding profitability, there is no any remarkable change (either increase / decrease) in GPM, OPM, RONW and ROCE against takeover deals of both public and private sector banks over 5 year in pre and post event periods. However, the net earnings after all expenses in 5 year, i.e., net profit on an average for 5 year have increased from 8.64 per cent in pre-period to 10.83 per cent in post-period against acquisition deals of all sector banks. That is, net earnings tend to increase against taking over of private limited banks by public and private sector banks in India.

It is therefore concluded from this study that there have been remarkable increases in the liquidity position of OBC and SBI during shorter time period of 3 year. State Bank of India is also found to have performed better compared to other public sector banks against event after its acquisition activity. On the other hand, the performance of private sector banks is found to be better in pre-period compared to their performance in post-acquisition period. It is also observed that there has been notable change in the liquidity position of the public sector banks due to their acquisition activities whereas there have been significant decline their activities in turning their assets for generating income. It is however found that the net earnings of public sector banks in shorter-time periods increased significantly after acquiring other banks.

It is further found that the performance of public sector banks in terms of generating income relative to their investment in fixed assets is significantly and negatively affected whereas their performance with respect to its net earnings positively influenced by acquisition deals. The financial performance of private sector banks during shorter time period of 3 year became poor after their acquisition deals. From the study, acquisition of private limited banks by private sector banks experienced significant negative effects on its liquidity position as well as on its overall financial performance.

However, overall findings of the study suggests that financial performance of both public and private sectors banks, with respect to acquiring private limited banks does not result in any notable changes in its liquidity position as well as on its profitability levels. But the efficiency of the banks in generating income relative to their investment in fixed assets has declined in shorter time period. It is therefore concluded from the study that net earnings in longer time period of five year tend to increase against taking over of private limited banks by public and private sector banks in India.

(b) CAMELS rating of selected merged banks

Capital Adequacy Ratio

From the study, it is found that BOB have been performing consistently on all the ratios of capital adequacy followed by HDFC and ICICI. Other public sector banks like PNB, SBI and OBC have followed these high performers closely

With respect to advances to assets, BOB had given high advances followed by PNB, OBC, SBI, ICICI and HDFC respectively. In government sector to total investment, OBC bank performs well, followed by PNB, SBI, BOB, HDFC and ICICI.

From this observation, we can infer that both public and private sector banks involved in this study have been performing well in terms of capital adequacy dimension. While HDFC and ICICI have performed well in debt-equity ratio and capital adequacy sub-dimension; public sector banks such as BOB, PNB, SBI and OBC have been good in advances to assets sub-dimension.

Assets Quality

From the study, it is found that BOB have been performing consistently on all the ratios of capital adequacy followed by HDFC and PNB. Other merged banks selected for this study such as OBC, SBI and ICICI are placed from fourth to sixth respectively.

With respect to total investments, BOB had given high advances followed by OBC, PNB, SBI, ICICI and HDFC respectively. In Net NPA to total assets, HDFC bank performs well, followed by BOB, PNB, OBC, ICICI and SBI. From this observation, irrespective of the ownership-public or private, the selected merged banks have performed well. Interestingly, it is observed that larger banks such as ICICI and SBI assets quality ratio are comparably lesser than their smaller counterparts.

Management Efficiency

The study found that PNB have been performing consistently on all the ratios of capital adequacy followed by SBI and HDFC. Other merged banks selected for this study like BOB, OBC and ICICI have followed these high performers in the respective order.

As for as business per employee ratio, OBC bank performed well followed closely by ICICI, BOB, PNB, HDFC and SBI respectively. With respect to profit per employee, ICICI have accrued high profits followed by OBC, BOB, HDFC, PNB and SBI respectively. From this observation, irrespective of the ownership-public or private, management efficiency of the selected merged banks are good. Interestingly, it is also observed that public sector banks such as SBI and PNB have to improve on their management efficiency dimension compared to its counterparts.

Earning Ability

It is found from the study that HDFC have been performing consistently on all the ratios of earning quality followed by PNB, ICICI, BOB, SBI and OBC respectively.

With respect to net profit to average assets, HDFC performed high followed by PNB, BOB, SBI and respectively. In interest income to total income, OBC bank performs well, followed by PNB, BOB, SBI, HDFC and ICICI. Finally, in non-interest income to total income, ICICI performed well followed by HDFC, SBI, BOB, PNB and OBC respectively.

HDFC bank's earning ability ratio is high compared to that of other banks in this study. PNB, ICICI, BOB, SBI and OBC are ranked from second to sixth respectively. It is hence referred that that private sector banks perform well on earning ability than public banks.

Liquidity Ratio

It is found that BOB have been performing consistently on all the ratios of liquidity followed by OBC and HDFC. Other merged banks selected in this study such as ICICI, PNB and SBI have followed these high performers closely.

With respect to liquid assets to demand deposits, BOB performed high followed by OBC, ICICI, PNB, and HDFC respectively. In liquid assets to total deposit, ICICI bank performs well, followed by BOB, HDFC, SBI, OBC and PNB.

It is hence concluded that the liquidity position of BOB is high compared to that of other banks in this study. OBC, HDFC, ICICI, PNB and SBI are ranked from second to sixth respectively. Interestingly, it is observed that the liquidity status of and the ownership of the firms-public or private are independent.

Sensitivity to Market Risk

With regard to sensitivity to market risks, HDFC bank is better prepared followed by PNB, OBC, BOB, SBI and ICICI respectively

Overall CAMELS ratings

From this study, it is observed that among the selected merged banks, Bank of Baroda performed well on the aggregate CAMELS dimension. HDFC, PNB, ICICI, OBC and SBI banks performed comparably lesser and are ranked from second to sixth in the given order. From the combined rating assessment of selected merged banks using the CAMELS method it emerges that it that private sector merged banks are better placed compared to that of public sector merged banks excluding Bank of Baroda.

It is therefore concluded that private merged banks such as ICICI and HDFC have an edge over its counterpart from the public sector such as Oriental Bank of Commerce, Bank of Baroda, etc. on dimensions such as capital adequacy, management efficiency and earning quality. At the same time, public sector banks such as State Bank of India and

Bank of Baroda performs relatively better in asset quality dimension and liquidity management dimension respectively when compared to its private sector counterparts. It is therefore concluded that the CAMELS rating of the merged banks suggests that both the public and the private banks have been performing well on different dimensions and private sector merged banks perform better than that of its public counterparts.

Stock price reactions of the merged banks: an event study approach

In this chapter, an event study examining the stock market reaction to a merger announcement, i.e. whether investors believe it will create or destroy value referring to the sensitivity of the market to new information is presented. The stock market reaction is measured by abnormal returns and the abnormal returns are the difference between the expected price without the event and the actual price. The expected price is the price that would be expected without the event. This is calculated using the stock beta, i.e. the stock's historical behaviour relative to a market index. Without the event, abnormal returns should be zero. Abnormal returns or cumulative abnormal returns reflect the market's prediction of a merger's outcome. A positive stock market reaction to announcement can then be interpreted as the benefits from the actual deal exceeding the expected benefits from the best-assumed potential deal. A negative stock market reaction to announcement can be interpreted as the benefits from the actual deal falling short of the benefits from a better potential deal. Hence this study evaluated shareholder wealth creation based on Abnormal Return (AR) and Cumulative Abnormal Returns (CAR) arrived at using Market Model (MM) and Market Adjusted Model (MAM).

Bank of Baroda - Bareilly Corporation Bank Ltd

It is certain that market has anticipated and welcomed the acquisition activity of BOB, in turn resulting in increased wealth to the shareholders. This shows that an increase in the shareholders' wealth of BOB is more relative to portfolio risk compared to entire market

Bank of Baroda (BOB) acquiring Banaras State Bank Ltd.

It is inferred that shareholders wealth of BOB experienced remarkable destruction due to negative reaction of the market for BOB acquiring Banaras State Bank Ltd. It is inferred that the market reacted negatively and resulted in the destruction of the shareholders' wealth against BOB's acquisition of Banaras State Bank Ltd. It is also noted that the destruction of wealth is higher relative to market risk.

Oriental Bank of Commerce's (OBC) acquiring Punjab Cooperative and Bari Doab Bank Ltd.

It is found that the wealth of shareholders' of Oriental bank of commerce remain unchanged as market did not give any importance to acquisition activities of the bank. The market is found to be reluctant towards acquisition activities of Oriental Bank of Commerce and destruction in share holders' value during event period is not at mentionable level.

Oriental Bank of Commerce (OBC) acquiring Global Trust Bank Ltd

It is observed that there has been a remarkable reduction in the shareholders' wealth of OBC relative to its acquisition of Global Trust Bank. It is therefore, concluded that market initially responded to the leakage of acquisition information but become reluctant and restrained from giving important to the acquisition of Global trust bank until it was officially announced. After official announcement, market then reacted negatively and resulted in the destruction of the wealth of shareholders' of OBC.

Punjab National bank acquiring Nedungadi Bank Ltd

The study confirms the substantial decline in risk adjusted wealth of shareholders' of Punjab National Bank due to its activity involving acquisition of Nedungadi Bank Ltd. As a result, there has been destruction of wealth relative to market risk and an increase in shareholders' value relative to market return as well.

State Bank of India's acquiring Kashinath Seth Bank

It is apparent that there has been positive wealth effect for shareholders' of State Bank India from its acquisition deal with Kashinath Seth Bank. That is, irrespective of volatility in the market, the investors of State Bank of India considered the acquiring Kashinath Seth Bank as favourable and acted positively. This in turn has led the market to add additional wealth to the shareholders' of SBI.

Public sector banks

The study found that there has been negative reaction in the market after amalgamation activities of the public sector banks. In sum, it is concluded that the market tend to show positive reaction to upcoming acquisition deals of the public sector banks and it has given return higher than return from market portfolio to the investors after amalgamation.

HDFC acquiring Times Bank Ltd

It is observed that, 3 out of 4 significant AR in post-event period is positive, indicating that the investors are confidence about HDFC banks future plans which will be carried out by amalgamating the Times Bank Ltd. This scenario implies that there has been increase in shareholders wealth relative to market after HDFC bank's acquisition deal with Times Bank Ltd.

ICICI Banks acquiring Bank of Madura Ltd

The study shows that there has been destruction in shareholder wealth on the event of acquisition deal of ICICI bank with Bank of Madura Ltd. That is, from the day near to announcement to 15 days after the announcement, the market tends to show positive reaction by increasing wealth to the shareholders.

Private sector banks

There has been significant reduction in shareholder wealth to the extent of 7.55 per cent during 31 days event periods. This envisages that the investors were panic about acquisition deal and started to sell of their shares to minimize their losses. The above status of CAR has provided evidence that market considered the deal positively after press release and incorporated its positive reactions by increasing market value of shares of these two banks.

Public sector and Private sector banks

It is understood that the market has tried to react negatively to the most of the banks' acquisition announcement but overall there was either destruction or creation in shareholder wealth of investors of public and private sector banks. It is found that the investors of four are earned returns significantly higher than return earned by not suffered with any loss in their investment due to acquisition announcement of the bankers; instead they earned significantly higher return compared to return from market portfolio.

It is therefore concluded from this study, mergers and acquisitions are regarded as a viable factor in enhancing firms' performance and resultant increase in shareholder's wealth. Though skepticism exists about mergers bringing lose to banks cost efficiencies, it is observed that higher market prices emerges as a distinct beneficial outcome of mergers and acquisitions. This study therefore suggests that merger and acquisitions of banks or such significant events of consolidation strategy or transactions directly or indirectly affect the shareholders sentiments resulting in increase market share. Mergers are found to enhance performance as well as increased wealth for both the businesses and shareholders.

Implication of mergers: a perceptional study

In this chapter the study on the perception of employees about merger and acquisition is presented. The mean scores are calculated for ascertaining pre and post merger efficacy. In order to know whether the opinion of the respondents about pre and post merger status is independent of their socio-economic characteristics or not, the mean perception scores are compared across categories by socio-economic characteristics and the significance of the difference in mean values are checked using t-test for two groups and F-test (one-way ANOVA) for more than two groups.

Employees' perception

The findings based on the entire samples' attitude are irrefutable, the perception of the respondents are compared based on their demographic characteristics to know whether the respondents irrespective of the socio-economic characteristics are similar or dissimilar in their opinion. If the difference in opinion across respondent groups is insignificant, then the findings based on the entire sample are conclusive and unquestionable.

Age and Perception

It is found that the bank employees of all ages have felt positively about activities of the bank after takeover process except about "feeling nervous and uncomfortable when meeting individuals from the merged Bank" and "Present Salary Structure at the Merged Bank".

Gender and Perception

It is found that the male and female employees have positive attitude towards "My supervisor provides me with the necessary orientation concerning the merging process", "I feel welcome and respected by my new colleagues", "I look towards my professional future at the Bank in a positive way" and both groups are found with neutral opinion about remaining aspects after merging activities.

Employee Status and Perception

It is found from the comparison between clerks and officers regarding after merging activities that both groups differ in their attitude only in respect of "feeling nervous and uncomfortable when meeting individuals from the merged Bank".

Marital Status and Perception

It is found that positive attitudes towards "feeling adequately involved in changes to their work environment", "missing their colleagues from the previous bank" and "feel welcome and respected by their new colleagues" is significantly more among unmarried bank employees than that of married bank employees, and both marital status groups tend to be similar in their attitude in respect of other after merging activities.

Educational Classification and Perception

The bank employees with "above degree" qualification have been "neutral" whereas those with "below degree" and "degree" qualification have perceived positively. Otherwise, the bank employees irrespective of their educational status are found with similar attitude towards various aspects of "after merging activities"

Job Experience and Perception

It is found that there is significant difference in attitude among bank employees in respect of "feeling adequately involved in changes to work environment", "missing my colleagues from the previous bank" and "feeling nervous and uncomfortable when meeting individuals from the merged Bank" after merging activities.

Annual Income and Perception

Irrespective of income levels, the employees feel adequately involved in changes to their work environment and expressed as "looking towards professional future at the bank in a positive way" after merging activities. It is therefore deduced that perception during post-merger is independent of their income level.

Joint and Nuclear Employees and Perception

It is found that the level of attitude towards most of the after merging activities is independent of the family type of bank employees.

Perception of employees by bank type

As the attitude of the public and private sector bank employees "after merging activities" is similar towards most of the aspects, it is deduced that there is no significant difference in the level of attitude between public and private sector bank employees "after merging activities".

From the study, it is concluded that the perception of public and private sector banks employees towards "before merging activities" and "after merging activities" is independent of their demographic characteristics. The study observed that bank employees were “too nervous about their future when they heard about the merger” before merging activities. However, the employees felt reassured once they received an honest communication from the management. The employees agreed that they were, “sufficiently informed about the process of the merger”, “understood the objectives behind the merger” and “merger was good for the bank”. It is therefore concluded that employees of the merged banks positively perceive merger activity taken up by their employer. The study posits the significance of communication, employee involvement and supervisory support for the success of merger activity.

7.3 Suggestions of the Study

Mergers and acquisitions have proven to be a significant and increasingly popular means for achieving corporate diversity and growth. But the existing failure rate of mergers suggests that neither academicians nor practitioners have a thorough understanding of the variables involved in planning and implementing a successful merger. It is suggested that a successful merger involves not only thorough financial and strategic analysis and planning, but also planning regarding congruence between the two companies' preferences about the implementation strategy for the merger.

- It is essential for managers of parent firms to decide about the immediate benefits their firms can provide to the acquired firm and how this will result in long term synergisms for both parties.
- The parent firm also should gently works with the acquisition personnel, solicits their inputs, and includes them in decisions that affect them.
- In order to standardize the use of its indigenous technologies into the acquired firm, management should seek for creative new combinations of the parent’s and acquired firm indigenous capabilities; understand each other’s technologies and businesses.
- Providing clear, consistent, factual, sympathetic, and up-to-date information in various ways will increase the coping abilities of employees, which will in turn increase their productivity. This increased productivity will positively impact on

the firm's performance and create sustained competitive advantage by achieving the projected strategic fit and synergies.

- It is also suggested that mergers and acquisitions should be examined separately, as they are driven by different factors.

Conclusion

This study has looked at the M&As activity in the banking industry in India during the period 1993-94 – 2004-05. The financial performance of both public and private sectors banks, with respect to acquiring private limited banks does not result in any notable changes in its liquidity position as well as on its profitability levels. But the efficiency of the banks in generating income relating to their investment in fixed assets has declined in shorter time period. In addition, the net earnings in longer time period of five year tend to increase against taking over of private limited banks by public and private sector banks in India. The CAMELS rating of the selected merged banks suggests private sector merged banks perform better than that of its public counterparts.

With regard to reactions to the announcement of merger, the market has initially tried to react negatively to the most of the banks' acquisition announcement but overall there was either destruction or creation in shareholder wealth of investors of public and private sector banks. The merger announcements in the banking sector typically result in no (or slightly positive) cumulative abnormal returns on the stocks of acquiring banks and significantly positive abnormal returns on target bank stocks. But the results should be taken with caution. Although stock prices reveal the market's expectation of future cash flows, actual performance may differ from market expectations. This observation is especially true for bank mergers.

Results also suggest that the surviving employees of the merged banks positively perceive merger activity taken up by their employer. Though the employees were nervous initially about the information of merger, communication from the management helped them to cope with the change. In fact, the employees were very happy with the sufficiency of information and communication from their supervisors. By involving them in the process of change, the employees felt confidence in their employer and started appreciating the objectives of the merger strategy.

This study contributes to the existing literature on mergers and acquisitions and provides information for both managers and shareholders who are interested in the improvement of bank's competitive position and profitability. In addition, for regulators and policy makers, it is important to understand how bank concentration affects the economy, i.e. competition, efficiency, stability of the financial system and the supply of banking services.

Scope for Future Research

The present study is an attempt to study the financial implications, share price reactions and its implications on the employees of banking companies before and after M & A. The scope proposes that mergers and acquisitions throw tremendous opportunities for future research with respect to:

1. The study with similar objectives could be made with reference to other sectors like IT sectors, manufacturing sector etc.
2. The study with similar objectives could be made from time to time.
3. The study to examine the content of other information relating to economy, political, legal procedure etc., could be made.
4. The study with similar objectives on demerger decision of companies of different sectors could be made.
5. The identification of factors that influence the reaction of stocks of different sectors will be of much use to many.
6. The study has assessed success or failure of mergers in financial terms. Human aspect of mergers has not been touched. Gauging the success of mergers through this aspect could be another area of research.

The study, in spite of all the above difficulties and limitations, has fulfilled its objectives and its findings and conclusion are universal in nature.

EFFICACY OF MERGER AND ACQUISITION
IN INDIAN BANKING INDUSTRY
(A study with reference to select Merged Banks in India)

Perception Bank Employees

Interview Schedule

<u>Please make ( ) tick in the appropriate blank space.</u>

A. Personal Profile:

1. Name :
2. Age :
3. Sex : Male ( ) Female ( )
4. Designation : Male ( ) Female ( )
5. Marital Status :
6. Education qualification : Below Degree ( ) Degree ( ) Above Degree ( )
7. Years of service (experience) :
8. Annual Salary : Below 1,50,000 ( ) 1, 50,000 to 5, 00,000 ( ) Above 5, 00,000 ( )
9. Place of Residence : Panchayat area ( ) Municipal area ( ) Corporation area ( )
10. Place if Present Job : Panchayat area ( ) Municipal area ( ) Corporation area ( )
11. Family Type : Joint Family ( ) Separate Family ( )

B. Pre-Merger Attitude	**SA**	**A**	**N**	**D**	**DA**
12. I was nervous my future when I heard about the merger.	( )	( )	( )	( )	( )
13. The communication from top management about the merger plans was assuring.	( )	( )	( )	( )	( )
14. I feel sufficiently informed about the process of the merger.	( )	( )	( )	( )	( )
15. I understand the objectives behind the merger	( )	( )	( )	( )	( )
16. I believe that the merger is the right way for the bank to become market leader in India.	( )	( )	( )	( )	( )

C. Post-Merger Attitude

17. I feel adequately involved in changes to my work environment.	( )	( )	( )	( )	( )
18. My supervisor provide me with the necessary orientation concerning the merging process.	( )	( )	( )	( )	( )
19. I miss my colleagues from the pervious bank.	( )	( )	( )	( )	( )
20. I feel out of place in the new bank.	( )	( )	( )	( )	( )
21. I experience frustration and stress from my attempts to adapt to the culture in the merged bank.	( )	( )	( )	( )	( )
22. There are things in my new network environment that I find surprising.	( )	( )	( )	( )	( )
23. I feel nervous and uncomfortable when meeting individuals from the merged bank.	( )	( )	( )	( )	( )
24. I have a clear understanding of my role within the new bank.	( )	( )	( )	( )	( )
25. I feel welcome and respected by new colleagues.	( )	( )	( )	( )	( )
26. My suggestions / feedback are always received by my supervisors.	( )	( )	( )	( )	( )

27. I look towards my professional future at the Bank in a positive way.	( )	( )	( )	( )	( )
28. How do you feel at the merged bank.	( )	( )	( )	( )	( )
29. How do you feel present salary structure at the merged bank.	( )	( )	( )	( )	( )
30. I am happy at my work place.	( )	( )	( )	( )	( )

General Comments about Post merged performance of the bank

SD – *Strongly Disagree*, **D** – *Disagree*, **N** – *Neutral,* **A** – *Agree,* **SA** – *Strongly Agree*

Thank you for your Participation.

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