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Mergers and Acquisitions: A Pre-post Risk – Return Analysis for the Indian Banking Sector

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Abstract

The purpose of this paper is to examine the comparative position of pre & post-merger stock risk-return performance of selected banks. Study covers comparison of Systematic and unsystematic risk during pre & post-merger period. Using data drawn from money control and yahoo finance this present exploratory study covers a sample of six banks, which were got, merge during year 2004 to 2010. Stock risk-return analysis has presented mix evidence, i.e. for some banks after merger performance has improved whereas for few banks it has decreased. Finally, evidence shows that proper analysis before merger deal can improve bank's performance. Because of the chosen research approach, the research results may not be generalizable for all banks. The paper includes implications for top management of banks in designing merger deal, which can be beneficial for them to have synergy gain in terms of financial, stock performance and wealth maximization.

JEL classification numbers: G14, G24
Keywords: Event study methodology, Stock return, Risk, Banking sector

1 Introduction

Indian banking sector is spine of Indian economy. In last few years, Indian banking sector has made brisk growth in terms of revenue due to favorable factors but few banks were not able to perform well. To improve performance, many banks were merging with another bank. Apart from this objective, merger is also done to improve banking services, create operating and financial synergy, market share gain, value maximization, market expansion & creation of large identity. Among all this, the matter that needs much concern is how merger affects the overall financial & stock risk-return performance of banks.

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In 1980, merger and company performance was an important issue in front of management thinkers. An empirical study (Michael Lubatkin, 1983) has made an argument that merger results in improvement of firm's performance. Studies in 90's have also examined the performance of firm. (Healy, 1992) has studied the performance of firms using a sample of the 50 largest mergers between U.S. public industrial firms completed in the period 1979 to 1983. Study has revealed that after merger, there was improvement in performance in terms of assets utilization, productivity and long term investment. Some argue that mergers and acquisitions activities create agency problems, resulting in less than optimal returns (Jensen, 1986) where as others argue that M&A create synergies that result into benefit for firm (Weston*et al*, 2004).

This is a comprehensive review of the merger and firm's performance. Again, there is no systematic literature review of merger and firm's performance which has been measured from different parameters. Given the fact that, the merger and firm's performance has scope for further studies. Thus, there is a need to analyses pre & post-merger impact of merger on stock risk-return performance. Research Gap can be seen at various points in present studies where there are scopes for further study. So, to fulfill this gap, this present study will address

1) Application of Z-Statics to have comparative analysis of stock return
2) Comparative analysis of both systematic &unsystematic risk

The main objectives of this study are as follows

1) To Study the pre & post-merger stock return of selected banks
2) To Analyse the comparative position of pre & post-merger stock risk (Both systematic and unsystematic risk)

The remainder of this paper is organized as follows. Section 2 explains the theoretical background of different literature on merger and firm's performance. The methodology is presented in Section 3. Empirical evidence and discussion on data analysis is present in Section 4. Conclusion is present in section 5.

Research question

RQ. – Does the stock risk-return performance of all banks involved in merger gets improve after merger?

2 Theoretical Background on Merger and Firm's Performance

Many researchers have analysed pre & post-merger performance of merged firm. Researchers from all over the world has taken various industries & carried out research work on merger & firm's performance. The detailed literature reviews are discussed for the merger happened in Canada, Dubai, Finland, France, Germany, Greece, Hungary, India, Ireland, Italy, Japan, Latvia, Lithuania, U.K & U.S.A. Some researchers have made an argument that mergers and acquisitions result in negative outcome (Jensen, 1986) where as others argues that M&A improves the firm's performance (Weston *et al,* 2004). Here, this section contains the Theoretical background on merger and firm's stock risk-return performance.

Stock performance refers to measurement of stock return and Risk. It includes evaluating the return and risk of stock before and after merger. Many researchers have studied stock performance using event study methodology. Researchers have found mix evidence on

merger and stock performance. Few researchers have found merger as beneficial for stock performance, for intense, (Walter, 1987) found that merger has positive impact on wealth creation for shareholders of both target bank & acquire bank. (Kumara and satyanarayana, 2013) analyses the post-merger stock return performance of Indian banks & found that merger announcement in the Indian banking industry has positive and significant impact of wealth of shareholders. (Govindarajan & Venkatesan 2011) have found that investors reacted positively, in turn increasing the share prices of the public sector banks involved in the deals. Olowoniyi *et al* (2012)studied the wealth creation for shareholders from Conglomerates and found relationship between net profit margin and positive return to shareholders in post-merger situation.(Olagunju and Olalekan, 2012) have studied the wealth of shareholders of Nigerian banks using t-Test and regression. Study found that with merger overall performances of banks have improved significantly, which in turn leads to wealth creation for shareholders. Again there are some researchers who had found positive impact of merger over stock performance. For example, (Tebourbi *et al* 2012, Evangelos *et al* 2014; Julie and Lei, 2014)

In contrast to these studies, many researchers have found that mergers resulted in negative return for stock. For example, Bradley *et al* (2011) has analysed the wealth from merger applying Regression model and reveals that the post-merger equity risk resulted in significant decrease in shareholder's wealth. Nagiya *et al* (2011) have studied the post-merger stock return performance using event study methodology of 120 days window (-60, +60) and found that after merger, there was a little fall in return of stock and not improved further. (Daniel, 2012) studied the wealth of shareholders who had made investment in firm pertaining to consumer goods, chemicals, IT, telecom and retail industry. Researcher has applied Z-Statistics &enhanced that due to poor firm acquisition, liabilities have increased more as compare to assets which ultimately, resulted in reduction of wealth of shareholders. Sara *et al* (2012) had studied the wealth creation from merger & found that acquisition of small firms creates negative synergy gains which lead to decrease in stock performance for shareholders. In their study, (Rafique and usman, 2013) have concluded that merger announcement brings negative effect on shareholders return in both short run & long run. Again there are many researchers who had found negative impact of merger over stock performance. For example, Rani *et al* (2011), Shobhana *et al* (2012).

3 Data Sources and Methodology

3.1 Sample and Data Collection

The data used in this analysis are Banks involved in activity of or merger between years 2004 to 2010. The sample period is selected to include both growing and downtrend period of global economy. Banks are identified from various issues of report on trend and progress issued by Reserve bank of India (RBI). Financial data and stock prices are collected from Money control, Yahoo Finance, Research Bank of India & Indian Banker's association. The selection of six banks year wise are: Oriental Bank of Commerce (2004), Federal Bank (2006), IDBI (2006), Indian Overseas Bank (2007), HDFC Bank (2008) & ICICI Bank (2010). Here, to perform Stock risk-return analysis data on stock prices are collected for duration of 80 days, i.e. 40 days before merger and 40 days after merger from yahoo finance. Present study covers stock return and risk analysis for Bidder bank.

3.2 Variable used

Event study methodology is used to study stock return. Various variables such as Daily returns of stock, average abnormal returns (AAR), cumulative abnormal returns (CAR) and security returns variability (SRV) are taken. These variables are taken by many researchers such as (Anand and singh, 2008), Rani *et al* (2011), Nangia *et al* (2011), Shobhana *et al* (2012) in their studies.

4 Empirical Results and Analysis

4.1 Stock Risk-return Analysis

4.1.1 Event Study Methodology

Event study methodology deals with checking Daily returns of stock, Average abnormal returns(AAR), Cumulative abnormal returns (CAR), Security returns variability (SRV) during merger period. Till date many researchers have undertaken a study using 30, 40 and 60 days' event study methodology. (Anand and singh, 2008), Rani *et al* (2011), Nangia *et al* (2011), Shobhana *et al* (2012) have used event study methodology to study stock return in pre and post-merger period. They have found mix evidence on merger and stock return. Wong *et al* (2009) in a study proved that merger result in positive return for shareholders of bidder firm.

The information on bank merger is very sensitive for investors. This Event study methodology is carried out covering total period of 80 days, i.e. 40 days before merger and 40 days after merger. Here, BSE Sensex is used to compute market returns. Under event study methodology, Daily returns of stock, daily return of BSE, Average abnormal returns, Cumulative abnormal returns, Security returns variability (SRV) model & z statistic are calculated using following formulas.

1) Daily returns are calculated of each selected bank for both pre and post-merger periods by using the following equation:

$$R_{it} = [(P_t - P_{t-1}) / P_{t-1}]*100 \quad (1)$$

Where, R_{it} = the daily returns of a stock 'i' at time't'

P_t = the closing price of a stock at time't'

P_{t-1} = the previous day closing price of a stock at time't-1'

2) Daily return of BSE is calculated using following formula:

$$R_{mt} = [(P_{mt} - P_{mt-1}) / P_{mt-1}]*100 \quad (2)$$

Where,

R_{mt} = returns for the market index at time't'

P_{mt} = the closing index value 'm' at time't'

P_{mt-1} = the previous day closing index 'm' at time't-1'

3) Abnormal returns were computed for each stock as follows:

$$AR_{it} = [R_{it} - R_{mt}] \quad (3)$$

Where,

AR_{it} = excess returns for stock 'i' at time 't'

R_{it} = simple returns of a stock 'i' at time 't'

R_{mt} = returns for the Market Index at time 't'

4) Average abnormal returns are computed by below given equation

$$AAR_t = \sum \mathrm{AR}_{it} \times (1/n) \quad (4)$$

Where,

AAR_t = average abnormal returns at time't'

AR_{it} = abnormal returns for stock 'i' at time't'

n = sample size

5) To check cumulative effect of events, the Cumulative abnormal returns on stocks is calculated using below given formula

$$CAR_t = \sum \mathrm{AR}_t \quad (5)$$

Where,

CAR_t = Cumulative abnormal returns at time 't'

AR_t =abnormal returns at time 't'

6) Security returns variability (SRV) model is used to know the reaction of the market. Symbolically it is

$$\mathrm{SRV}it = \Sigma\ \mathrm{AAR}^2it / V(AR) \quad (6)$$

$\mathrm{SRV}it$ = security returns variability of security 'i' at time 't'

AR^2it = abnormal returns on security 'i' at time 't'

V (AR) = variance of abnormal returns

7) z statistic is calculated using this formula:

$$Z_{stat} = (\bar{x} - \mu) / S / \sqrt{n} \quad (7)$$

Where,

$\bar{x}$ = mean of the sample

S = standard deviation of the sample

n = sample size

The study has formulated hypothesis for testing the short term price returns in respective event periods. To test the objectives mentioned above, the following hypothesis were formulated

H1: Higher price returns on securities (R) observed in the post-acquisition period compared to pre-acquisition period.

H2: Higher price returns on securities (AAR) observed in the post-acquisition period than market returns.

H3: Positive AAR is observed in the post-acquisition period than pre-acquisition in various securities.

Table 1: Event study methodology for Oriental bank of commerce

Time Period	Days	Mean Return Stock	Mean Return BSE	AAR	CAR	SRV	Z statistic
Pre-Merger	-40	0.0005	0.002	-0.0014	-0.0555	0.01	0.03
	-30	-0.0015	0.0016	-0.0031	-0.0944	0.02	-0.49
	-15	-0.008	0.0004	-0.0084	-0.0012	0.2	-1.76
	-7	-0.0016	-0.0018	0.0002	0.0016	0	-0.8
	-3	-0.012	-0.0095	-0.0025	-0.0075	0.99	-7.2
Post-Merger	3	-0.0036	-0.0015	-0.0051	-0.0115	0.54	-1.02
	7	-0.0041	-0.0038	-0.0003	0.0221	0.1	-0.92
	15	0.0017	0.002	-0.0003	-0.0044	0	0.26
	30	0.002	0.0029	0.0148	-0.0241	0	-0.58
	40	0.0022	0.003	0.0157	-0.0294	0	-0.54

Table1 shows that mean return for stock of oriental bank of commerce in pre-merger period was negative except for all days except 40 days period where as in post-merger it was remain positive for 15, 30 & 40 days window. Highest return of stock was during -40days window, i.e. 0.05% in pre-merger period and 0.22% in post-merger period again at 40days window. It was revealed that after merger, mean return of stock has improved. Mean return for BSE was remaining positive except initial period of 3 & 7 days in both pre and post-merger duration. Highest return for stock in pre and post-merger was observed at 0.2% & 0.3% during 40days window period, respectively. Average abnormal returns were remaining negative in pre-merger period except 7 days window whereas AAR becomes positive from 30days event window in post-merger period. In pre-merger period, Highest AAR was 0.02% at 7days window where as in post-merger highest AAR was 1.57% at 40 days window. It further enhances that after merger the AAR has improved. A cumulative abnormal return, in both pre & post-merger period were remaining positive only for 7 days window and then after it turns negative returns. Highest CAR was 0.16% and 2.21% at 7days window in pre & post –merger period, respectively. SRV was remaining positive in both pre and post-merger period. Highest SRV was 0.99 in pre-merger and 0.54 in post-merger period. Further here all three hypotheses are accepted. The computed Z statistic value at 95% confidence level for two tail test is lower than the table value 1.96 in all pre and post-merger periods.

Table 2: Event study methodology for Federal Bank

Time Period	Days	Mean Return Stock	Mean Return BSE	AAR	CAR	SRV	Z statistic
Pre-Merger	-40	0.0053	0.003	0.0023	0.09	0.013	1.15
	-30	0.0051	0.0044	0.0008	0.023	0.001	0.96
	-15	0.0064	0.0037	0.0027	0.045	0.01	0.77
	-7	0.008	0.0046	0.003	0.002	0.01	0.48
	-3	0.02	0.0002	0.016	0.048	0.09	6.17
Post-Merger	3	-0.0152	-0.017	-0.0135	-0.04	0.88	-2.6
	7	-0.0044	-0.0001	-0.0043	-0.03	0.01	-0.38
	15	-0.002	0.015	-0.003	-0.047	0.01	-0.38
	30	0.0017	0.027	-0.001	-0.028	0	0.019
	40	0.0018	0.024	-0.0005	0.02	0	0.048

Table 2 presents the Event study analysis for federal bank. It is observed from the table that, in pre-merger period return of stock was remain positive which became negative during 3, 7 & 15 days window in post-merger period. Highest return in pre-merger was 2% which was dropdown in post-merger period and came to 0.18%. Again, in pre-merger period, return of BSE was remaining positive with highest return of 0.46%. In post-merger period, return of BSE was become positive from +15 days windows onwards with highest return of 2.7%. AAR was remain positive in pre-merger period but after merger it turnout to be negative. Highest AAR was 1.6% & -0.05% in pre & post-merger period, respectively. In same line, CAR was remaining positive in pre-merger period & remains negative in post-merger period except 40 days window. It further enhances that merger resulted in reduction of stock performance and hence stock return was decline in post-merger period. SRV was remaining positive in both pre and post-merger period. Highest value of SRV was 0.09 & 0.88 in per and post-merger period, respectively. Hence, here all three hypotheses are rejected. Z statistic value at 95% confidence level for two tail test is lower than the table value 1.96 in all pre and post-merger periods except 3-day window.

Table 3: Event study methodology for IDBI Bank

Time Period	Days	Mean Return Stock	Mean Return BSE	AAR	CAR	SRV	Z statistic
Pre-Merger	-40	0.0109	0.0035	0.0073	0.285	0.06	1.81
	-30	0.0099	0.0028	0.0071	0.21	0.05	1.41
	-15	0.164	0.003	0.134	0.201	0.1	1.36
	-7	0.0166	0.004	0.0126	0.088	0.13	1.15
	-3	0.0397	0.0036	0.0361	0.108	0.75	1.57
Post-Merger	3	0.0036	0.0044	-0.0008	-0.0025	0.63	3.35
	7	-0.0019	0.0062	-0.0081	-0.0565	0.82	-1.04
	15	0.0031	0.0038	-0.0007	-0.01	0	0.336
	30	-0.0017	0.0032	-0.0049	-0.14	0.09	-1.1
	40	-0.0029	0.003	-0.0059	-0.23	0.14	-1.8

From table 3 shows event study methodology for IDBI Bank. In pre-merger period return of stock was positive which became negative during 7, 30 and 40 days window in post-merger period. Highest return was 1.64% & 0.36% in pre-merger & post-merger period, respectively. Mean return of BSE was remaining positive in both the situation with highest return of 0.4% & 0.3% in pre-merger & post-merger period, respectively. AAR and CAR both were remain positive before merger and turnout to negative after merger. SRV was remaining positive in both pre and post-merger period. Highest value of SRV was 0.1 & 0.82 in pre and post-merger period, respectively. Here, again all three hypotheses are rejected. Z statistic value at 95% confidence level for two tail test is lower than the table value of 1.96 in all pre and post-merger periods except 3 days window in post-merger period. It overall concludes that merger does not result in wealth creation for shareholders.

Table 4: Event study methodology for Indian Overseas Bank

Time Period	Days	Mean Return Stock	Mean Return BSE	AAR	CAR	SRV	Z statistic
Pre-Merger	-40	-0.0035	-0.0021	-0.0014	-0.0555	0	-1.56
	-30	-0.0012	-0.0021	0.0009	0.0267	0	-0.71
	-15	0.0053	0.0002	0.0051	0.0766	0.05	0.65
	-7	0.0056	0.0042	0.0014	0.0098	0	0.49
	-3	0.0027	-0.0013	0.0039	0.0118	0.02	0.062
Post-Merger	3	0.0033	0.0144	-0.0111	-0.0333	0.19	0.12
	7	-0.0011	0.0084	-0.0095	0.0666	0.31	-0.42
	15	0.0097	0.008	0.0016	0.0247	0.01	1.42
	30	0.0055	0.0042	0.0013	0.0384	0	1
	40	0.0036	0.0037	-0.0001	0.0049	0	0.58

Table 4 represents the event study methodology for Indian overseas bank. Before merger, mean return of stock was remaining positive till 15 days windows and then it turns to negative return. In post-merger period, mean return was remaining positive except 7 days window. Highest return of stock was 0.56% & 0.97% in pre and post-merger period, respectively. Mean return of BSE was remaining positive as well as negative in pre-merger period but remain only positive in post-merger period. Highest mean return was 0.42% & 1.44% in pre& post-merger period, respectively. AAR was positive in pre-merger period except 40 days windows where AAR in post-merger was remain positive for only 15 & 30 days window. Highest AAR was 0.51% in pre-merger period and 0.16% in post-merger period. In relation to that, CAR was positive in pre-merger period except 40 days window and after merger, it remains positive except 3 days window. Highest CAR was 7.66% in pre-merger period and 6.66% in post-merger period. SRV was remaining positive in both pre and post-merger period. Here, all Hypotheses are rejected. Z statistic value at 95% confidence level for two tail test is lower than the table value 1.96 in all pre and post-merger periods.

Table 5: Event study methodology for HDFC Bank

Time Period	**Days**	**Mean Return Stock**	**Mean Return BSE**	**AAR**	**CAR**	**SRV**	**Z statistic**
Pre-Merger	-40	0.012	0.027	-0.0016	-0.06	0.01	1.17
	-30	0.025	0.033	-0.0008	-0.02	0	1.31
	-15	-0.0074	-0.0018	-0.0057	-0.085	0.15	-1.26
	-7	-0.0088	0.0005	-0.0093	-0.065	0.25	-0.88
	-3	-0.028	-0.01	-0.0178	-0.0533	1.25	-2.98
Post-Merger	3	-0.0056	-0.0006	-0.005	-0.015	1.39	-1.21
	7	-0.014	-0.0074	-0.0069	-0.048	0.25	-2.23
	15	-0.01	-0.0039	-0.0061	-0.09	0.12	-1.59
	30	-0.092	-0.003	-0.0032	-0.096	0.04	-2.14
	40	-0.0061	-0.0043	-0.0017	-0.068	0.01	-1.04

Table 5 shows that during pre-merger period, return of stock was remain negative for 3,7 & 15 days windows and be positive in 30 and 40 days window. In contrast to that, during post-merger the return was remaining negative for all days. Mean return for BSE during pre-merger period was remain positive except 3 & 15 days windows where as it remains negative for all days in post-merger period. AAR & CAR remain negative for both pre & post-merger time periods. SRV remain positive for all days. Here, all hypotheses are rejected. The computed Z statistic value at 95% confidence level for two tail test is lower than the table value 1.96 in all pre and post-merger periods except -3 days, +7 days & +30 days Window.

Table 6: Event study methodology for ICICI Bank

Time Period	Days	Mean Return Stock	Mean Return BSE	AAR	CAR	SRV	t statistic
Pre-Merger	-40	0.0029	0.0007	0.0021	0.0827	0.03	1.14
	-30	0.0047	0.0011	0.0036	0.1078	0.1	1.91
	-15	0.0041	-0.0001	0.0042	0.0632	0.09	0.95
	-7	0.0004	-0.0003	0.0007	0.0049	0	0.69
	-3	-0.0056	-0.0039	-0.0017	-0.005	0.02	-0.87
Post-Merger	3	0.0191	0.0074	0.0117	0.0351	0.4	1.8
	7	0.0042	0.001	0.0032	0.0221	0.04	0.57
	15	0.0056	0.0019	0.0037	0.055	0.08	1.46
	30	0.0051	0.0036	0.0015	0.0444	0.02	2.02
	40	0.0044	0.0031	0.0014	0.0524	0.02	2.11

Table 6 shows event study methodology for ICICI Bank. Pre-merger mean return of stock was remain positive except day three where as it remains positive for all days in post-merger period. Highest positive return was 0.47% & 1.91% in pre and post-merger period, respectively. During pre-merger period, mean return of BSE was remaining negative for 3, 7 & 13 days window and remain positive for rest of the days. In Post-merger period, mean return of BSE was positive for all days with highest return of 0.74%. AAR & CAR, both in pre-merger period remain positive except day 3 window. In Post-merger period both AAR & CAR remain positive. AAR has highest return of 0.42% & 1.17% in post-merger period. In same line, CAR has highest return on 1.07% & 5.55% in post-merger period. SRV Remain positive in both pre and post-merger period. All hypotheses are accepted. Z statistic value at 95% confidence level for two tail test is lower than the table value 1.96 in all pre and post-merger periods except +30 & +40 days window in post-merger period. Overall, after merger return has improved and merger remains positive for shareholders.

4.1.2. Risk Analysis

Bodie *et al* (2011) defines risk as uncertainty about future rate of return. There are 2 types of risk namely, unsystematic risk &systematic risk. (Sinhaand Gupta, 2011) has analyzed the risk with reference to merger and found that in case of few banks merger resulted in reduction of overall risk of firm. Table 9 shows the composition of total risk as systematic and non-systematic components for both pre and post-merger periods. To perform risk analysis data on stock prices are collected for duration of 80 days, i.e. 40 days before merger and 40 days after merger. The date of merger of particular bank is taken as the reference point. Here, unsystematic risk is calculated through variance of returns and systematic risk is calculated through beta.

Table 7: Risk Analysis

Name of Bank	Time Period	Unsystematic Risk	Systematic Risk
Oriental bank of commerce	Before Merger	0.06%	1.42
	After Merger	0.02%	0.833
Federal bank	Before Merger	0.04%	0.567
	After Merger	0.10%	2.06
IDBI bank	Before Merger	0.11%	2.03
	After Merger	0.03%	1.34
Indian overseas bank	Before Merger	0.06%	0.69
	After Merger	0.06%	0.88
HDFC bank	Before Merger	0.08%	0.98
	After Merger	0.15%	1.23
ICICI bank	Before Merger	0.03%	2.07
	After Merger	0.03%	1.55

In case of Oriental bank of commerce, unsystematic risk was decreased from 0.06% to 0.02% along with systematic risk from 1.42 to 0.833. It revealed that merger has made an effect of diversification that resulted in reduction of risk and overall, merger remains positive for shareholders. Federal bank has found increase in both risks after merger, i.e. unsystematic risk from 0.04% to 0.10% and systematic risk from 0.567 to 2.06 which reveals negative effect of diversification. Overall, merger remains negative for shareholders of federal bank. In case of IDBI, after merger, both risk has decreased, i.e., systematic risk from 2.03 to 1.34 and unsystematic risk from 0.11% to 0.03%. There is positive effect of this diversification which resulted in reduction of risk and merger remain positive for shareholders. After merger of Indian overseas bank with Bharat Overseas Bank, unsystematic risk remains as it is but there is increase in systematic risk from 0.69 to 0.88. Merger does not have much diversification effect and remain somewhat negative for shareholders as merger has made little increase in systematic risk. HDFC Bank has done merger with Centurion Bank of Punjab. After merger, there is increase in both risks. Unsystematic risk has increased from 0.08% to 0.15% and systematic risk has increased from 0.98 to 1.23. It reveals that diversification has negative impact and merger resulted in increase in risk. Overall, it remains negative for shareholders. After merger, ICICI Bank has witness no change in unsystematic risk but systematic risk has decreased significantly from 2.07 to 1.55. It divulges that merger of ICICI Bank with the Bank of Rajasthan remain beneficial for shareholders of ICICI Bank.

5 Conclusion

Banks are going for merger due to various objectives such as market share gain, increase geographical coverage, value maximization; create financial synergy and so on. But few times to fulfill this objectives, acquirer banks do not consider few important parameters in target banks which leads to poor financial and stock performance. Stock return analysis was done covering a period of 80 days window (-40, +40). From study it is concluded that after merger stock return was remain positive for 2 banks, negative for 3 banks and average for 1 bank. After merger, unsystematic risk was increased for 2 banks, decreased for 2 banks where as it remains same for 2 banks over both periods. Among all banks,

maximum increase in unsystematic risk was found in HDFC Bank where as IDBI has maximum decrease. Systematic risk has increased for 3 banks. After merger, systematic risk was increased for 3 banks & decrease for 3 banks. Federal Bank has highest increase in systematic risk where as IDBI has highest decrease in systematic risk after merger.
Researchers can undertake further studies in area of merger and acquisition with respect to evaluation of stock performance. Moreover, it can be studied that does valuation of target bank done by acquire bank has impact on profit and return for acquire bank or not. Study has practical implications for managerial cadre. Top management of bidder bank can have a proper analysis of past data and they can consider stock risk return as parameters rather than just considering few objectives before making merger deal. Doing such practices can make merger more successful. As shareholders are one of the important stake holders, bank managers can decide merger share exchange ratio which motivate the shareholders to invest more in bank securities after merger. Through stock risk analysis, managers can decide the merger deal in such way that can reduce risk, especially, unsystematic (Diversifiable) risk. Because as unsystematic risk decreases it motivates investors to invest more in bank & vice versa.

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