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Do Mergers Create Shareholders Value? Evidence from Indian Banking Industry

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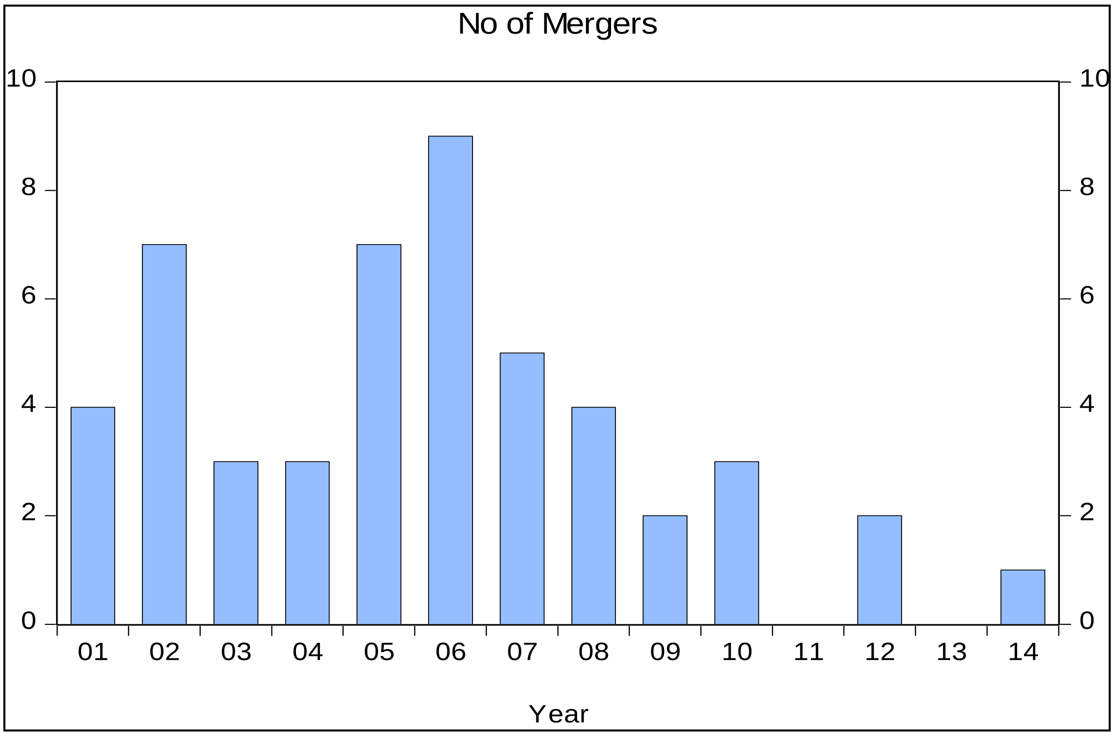
Abstract

Mergers and Acquisitions has been adopted one of the strategy to create shareholders value. Mergers happen in Indian banking industry to generate value to shareholders by risk management, consolidation, competitiveness, economics of scale and synergies. The wealth effects have been primarily studied from market based studies on the ground of efficient market theory. How the announcement affects the stock returns ultimately influences the shareholder wealth. The objective of this paper is to find out the effects of mergers announcement to the acquiring banks return in short run period in reference to Indian banking industry. It is considered that announcement has impacted the stock price. The paper is taken Indian banking sector from 2001-2014 with a sample size of sixteen banks .The results indicate negative and insignificant returns to the shareholders of acquiring banks in short run period.
Keywords: Mergers and Acquisitions, Event Study
JEL Classification: G34.

1. INTRODUCTION

Mergers and acquisitions is one of the important dimensions of corporate control by expanding the business and enhanced the revenue and reduce the cost, updating the technology and creating value to the shareholders. The reforms in banking deregulation of economy, introduction of Basel II norms, new licensing norms, entry foreign banks given the banking industry challenges as well as opportunities. To fulfil the expectation of the shareholders, the Indian banks takes the route of mergers and acquisitions in way of growth, synergy, managerial efficiency, tax consideration and fulfil the regulatory requirement, In light of the above cause Indian banking sector witness series of mergers in banking industry ,few private banks keep their eye to open the new business for the next few years , few new generation of private banks keep eye for expanding their business by means of mergers and acquisitions. In the backdrop of this magnitude of impact of banking industry by means of mergers and acquisitions we would like to investigate the impact on mergers and acquisitions on stock returns in short run period. We would like to address whether Indian banking sectors create value to shareholders in the short run or not.

Figure 1: Year wise No of Mergers in Indian banking industry



Source: (compiled from Prowess Database)

Figure 1: represents the no of mergers in banking sector from 2001 to 2014, 2006 witness highest merger in number with nine deals and 2011 and 2013 have lowest number almost nil, data taken CMIE prowess, showed that there is decline in mergers in numbers and likely to fuel in future of revival of economy, post-election result, confidence in market and change in regulatory environment.

The rest of the paper is organised as follows. The following sections review the related literature on performance on banking sector, Section 3 provides the research objectives, section 4 discuss the methodology and sample selection, and section 5 presents the empirical results. Section 6 summarises and concludes.

2. LITERATURE REVIEW

Overview of Studies on Indian market

A few studies has been conducted in Indian context to judge the market reaction on account of mergers and acquisitions. Indian studies mostly dominated to accounting based study only. The scholars reported positive as well as negative abnormal return in short run period such as (Pandey 2001, Mishra & Goel 2005, Malhotra & Zhu 2006, Anand & Singh 2008, Kumar & Panneerselvam 2009, Kashiramka & Rao 2012, Kumar, Kumar & Deisting 2013, Rani et al. 2013 etc.

Overview of Studies on banking mergers

There are studies on abroad to the stock price reaction to the banking industry in particular. Cybo-Ottone and Murgia (1996) analysed 26 mergers of European financial service firm in the period of (1988-1995), shows that average abnormal returns to the target firm is positive, Cybo-

Ottone and Murgia (2000) go on employing event study methodology in Swiss market in between the period (1988-1997) found significant positive abnormal return to the both shareholder of acquiring as well as target firm. James and Ryngaert (2001) studied 64 large bank acquisitions on announcement during the period 1985-1996, find negative and significant cumulative abnormal return to the bidder's bank in short run period.

There are also few studies on Indian context in particular to Indian banking sector. Singh (2001) assessed the impact of reforms of operational performance commercial bank by using accounting based methodology. Bhide et al. (2002) concluded a study on the banking sector of India and reports there is increase in profitability because of mergers deals. T T Ram Mohan (2005) remarks that target firm generate value to the shareholders where as acquiring firm generate negative return to the shareholders. Manoj Anand and Jagandeep Singh (2008) analysed five private sector banks to gauge the impact of merges announcement on shareholder wealth he reported there is significant increase to the shareholder wealth to both bidder firm and target firm in short run period. M., Kumar, S., & Deisting, F (2013) examined the impact of mergers announcemnt on thirteen banks about stocks returns, volatility and liquidty of the bidder's banks and results repoted that there is limited impact on volatility in share price of banks and no significant impact on the liquidty of the bidder's bank. In summary few studies have conducted on Indian context only. The sample size is too small, most studies are stock returns only and there is dramatic change in Indian capital market in post global crisis and post-election results. There is need to evaluate the stock price reaction in Indian banking context in particular to merger announcement. The paper tries to make modest approach to analyse the stock returns in short run period.

3. RESEARCH OBJECTIVE AND HYPOTHESES OF THE STUDY

The objective of this paper is to focus whether shareholder value has been created or not in short-run period with reference to stock returns, in Indian banking sector. The paper has following issues:

- To generate abnormal return of acquiring company in short-run period of Indian banks
- To evaluate the mergers and acquisitions announcement on stock returns acquirer company in Indian banking sector in different window period

Hypotheses of the study

We would like to investigate whether the stock returns affected due to mergers announcement, is there any significant impact on these parameters of the stock of acquirer company due to the announcement effect in particular to short run period. Based on this following research hypothesis formulated.

- H_1= M&A announcement leads to significant abnormal return to the acquirer company in short-run period in pre- announcement period
- H_2= M&A announcement leads to significant abnormal to the acquirer company in short-run period in the event day itself
- H_3= M&A announcement leads to significant abnormal return to the acquirer company in short-run period in post- announcement period

DATA AND METHODOLOGY OF THE STUDY

The sample for this study is collected from CMIE Prowess Database. The sample consists of the announcements of mergers and ACQUISITIONS by banking companies listed on stock exchange. The study period covers mergers and acquisitions during the period from 2001-2014. The sample consists of domestic mergers of Indian banking sector only. All deals that fulfil certain conditions have been included in the study. The final sample consists of 16banking companies. For the purpose of this study the stock exchange announcement of the merger has been taken as event date (Day zero).In order to conduct an event study daily adjusted closing price of data all banking firms and CNX bank index has been uses as proxy for market return and the data has been collected from prowess database. The daily stock returns have been calculated as follows:

$$R_{i,t=}\frac{P_{i.t}}{P_{i,t-1}} - 1 \quad [1]$$

Short-term event studies

Fama et al is the first to use event study methodology for calculating the abnormal return. Abnormal return is crucial to judge the impact of an event as it isolate the effect of the event from other general market movement. A substantial feature of the event study is the choice of appropriate normal market model, Brown and warner (1985) indicate that the market model is the standard for evaluating returns around the announcement and provides good results. Abnormal return is the difference between actual returns and expected returns, expected returns is calculated by using market model:

$$AR_{i,t=} \quad R_{i,t-}\ E\ \ (R_{i,t}) \quad [2]$$

$$E\ \ (R_{i,t}) = \alpha_i + \beta_i\ R_{M,t+}\ \varepsilon_{i,T} \quad [3]$$

$AR_{i,t}$: is the abnormal return. $R_{i,t}$: is the actual return, $E\ \ (R_{i,t})$ is the expected return in absence of the event. α and ß coefficient is calculated by OLS over a window period of (-120,-21). $R_{M,t}$: is the Market return by using market index by observing at the time of t during the event window.

Then the cumulative abnormal return is $CAR_{i,T1,T2} = \sum_{t=T1}^{T2} AR_{i,t}$ [4]

The CAAR for the event window is calculated $CAAR\left(T_1\ ,T_2\ \right) = \frac{1}{N}\sum_{I=1}^{N} CAR\ \ i\ \ (T_1, T_2\ )$

[5]

The analysis of abnormal return over several windows captures the information regarding the market reactions to the mergers announcement effect before the announcement date (effects of insider trading or rumours), at the event date (merger effect), and the post – announcement period (temporary pressure on prices and probable post announcement correction).

4. EMPIRICAL RESULTS

Table 1: AAR and CAARs of Sample Acquirers (N=16)

Days	AAR	CAAR
-20	-0.0079	-0.0079
-19	0.0088	0.0009
-18	-0.0026	-0.0017
-17	-0.0326	-0.0343
-16	0.0025	-0.0317
-15	-0.0431	-0.0748
-14	-0.0376	-0.1125
-13	0.0303	-0.0822
-12	0.0264	-0.0558
-11	-0.0222	-0.0780
-10	0.1169	0.0389
-9	-0.1104	-0.0716
-8	0.0321	-0.0395
-7	-0.0410	-0.0804
-6	0.0162	-0.0643
-5	0.0367	-0.0276
-4	0.0036	-0.0240
-3	-0.0241	-0.0481
-2	0.0272	-0.0209
-1	-0.0612	-0.0821
0	**0.0345**	**-0.0476**
1	-0.0023	-0.0500
2	-0.0162	-0.0661
3	-0.0048	-0.0709
4	-0.0236	-0.0945
5	-0.0038	-0.0984
6	-0.0115	-0.1099

7	-0.0395	-0.1494
8	-0.0019	-0.1513
9	0.0092	-0.1422
10	0.1020	-0.0402
11	-0.0422	-0.0824
12	0.0021	-0.0803
13	0.0596	-0.0207
14	-0.0371	-0.0579
15	-0.0208	-0.0787
16	0.0404	-0.0383
17	-0.0034	-0.0417
18	-0.0002	-0.0419
19	0.0026	-0.0393
20	0.0081	-0.0312

Table 1, represents the average abnormal returns and cumulative abnormal return to the sample acquiring companies in [-20, 20] window period. The results depicts that the acquirer company experience negative cumulative average abnormal returns in the event date itself (CAAR -4.76%) and the acquirer company have negative cumulative abnormal return in post-acquisition period in short run that is (0 to 20 days). However the results shows that acquirer company shareholder also have negative cumulative average abnormal (0 to -20 day) in pre-event period.

Figure 2: Cumulative Average Abnormal Return for the Acquiring firm on the window of [-20, 20] window period: OLS Model

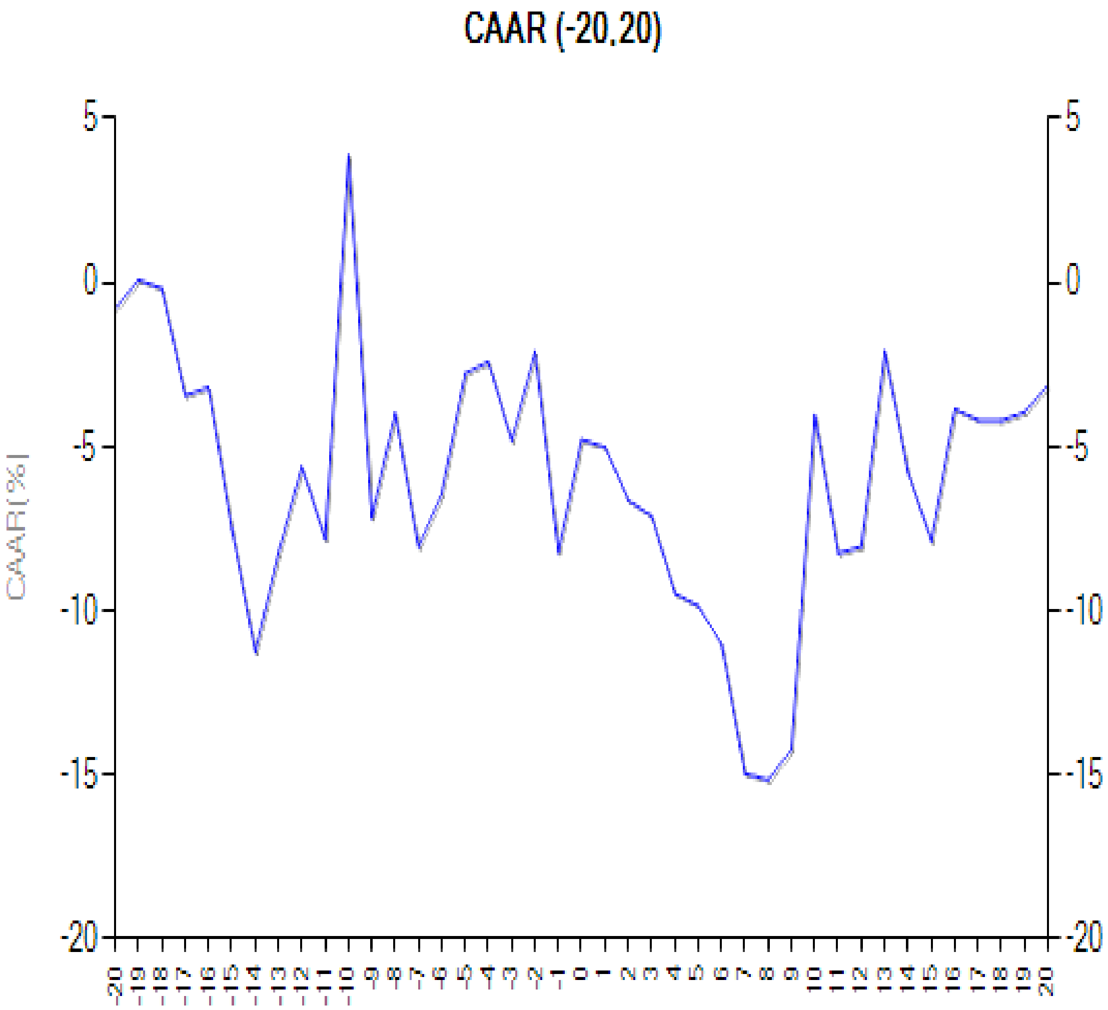


Figure 2: exhibits the trends of average abnormal returns of domestic acquisition of Indian acquiring company (-20 to 20) including pre and post event window in short run period. It is clear from the graphs that the acquiring company has lost shareholders wealth in post as well pre-event window period.

Table 2 : CAAR of Whole Sample (N=16)

Event Window	CAAR	Positive: Negative	t-test	P -Value
Market Anticipation[-20,-5]	-0.0276	07:09	-0.9326	0.35
Market Anticipation[-5,-1]	-0.0179	06:10	-0.5600	0.58
Event day market Reaction[0,0]	0.0345	09:07	1.6877	0.09
Market Reaction centred on the day[-10,0]	0.0304	08:08	0.3803	0.70
Post Announcement Market Return[2,10]	0.0098	09:07	0.0539	0.96
Post Announcement Market Return[5,20]	0.0633	07:09	1.0308	0.30
Total Abnormal Return[-20,20]	-0.0312	06:10	-0.6110	0.54

**** Statistical significance at 0.05 level***

Table 2, illustrates that in the whole study period the announcement of merger negative but insignificant, prior to the offer window [-20,-5], reports negative and insignificant CAAR of -2.76%, shows that the mergers announcement is not anticipated by the investor. On the event day the reported CAAR [0, 0] window period is 3.45 % and insignificant, where as in post- announcement period CAAR for the event window [5, 20] is 6.33% on an average the investor holding acquirer share for a period of 20 days before the event date and after the event date would lose a negative return of -3.12%.

Table 3: CAR of [-20, 20] window period

Name of Acquiring Banks	CAR	t-test	P-Value
Andhra Bank	0.2018	0.2499	0.8027
Bank Of Baroda	-0.1509	-0.125	0.9005
Bank Of India	-0.2389	-0.2374	0.8124
Corporation Bank	-0.0244	-0.0302	0.9759
Federal Bank Ltd.	-0.0545	-0.1077	0.9143
H D F C Bank Ltd.	-0.4627	-0.5137	0.6075
I C I C I Bank Ltd.	-0.4317	-0.6477	0.5172
I D B I Bank Ltd.	-0.4789	-0.4042	0.6860
Indian Bank	0.3873	1.3928	0.1637
Indian Overseas Bank	0.0464	0.0577	0.9540
Indusind Bank Ltd.	-0.1574	-0.1885	0.8505
Oriental Bank Of Commerce	-0.0373	-0.0456	0.9636
Punjab National Bank	0.3647	0.8309	0.4060
State Bank Of India	0.1427	0.1106	0.9119
Vijaya Bank	0.3121	0.2043	0.8381
Kotak Mahindra Bank	-0.0989	-0.1483	0.8821

* ***Statistical significance at 0.05 level***

Table 3, explains the stock returns of individual banks of [-20, 20] event window period. Out of sixteen banks the positive cumulative abnormal return generated to the shareholders by sixbanks, Andhra Bank (CAR =20.18%), Indian Bank (CAR=38.73%), Indian Overseas Bank (CAR=4.64%), Punjab National Bank (CAR=36.47%), State Bank of India (CAR=14.27%), Vijaya Bank (CAR=31.21%) and all other eleven banks reported negative cumulative abnormal return to the shareholders.

5. CONCLUSION, LIMITATIONS AND SCOPE FOR FURTHER RESEARCH:

The paper analyses the performance of Indian banking acquiring company in the short-run period in terms of return, of acquiring banks the sample consists of sixteen banking companies during the period from 2001 to 2014. The result indicates that there is negative return, in most of cases as it has been statistically insignificant in overall sample of acquiring banks. The paper is limited to judge the short run performance only. The sample consists only banking company however the study could be made for larger samples as well as long run performance of acquiring companies.

Table 4: List of Mergers of Sample Banking Firms

Name of Bank	**Target Company**	**Event Date**
Andhra Bank	Andhra Bank Housing Finance Ltd. [Merged]	21-03-2002
Bank Of Baroda	South Gujarat Local Area Bank Ltd. [Merged]	27-02-2004
Bank Of India	B O I Asset Mgmt. Co. Ltd. [Merged]	18-09-2002
Corporation Bank	Corpbank Homes Ltd. [Merged]	17-12-2004
Federal Bank Ltd.	Lord Krishna Bank Ltd. [Merged]	05-10-2005
H D F C Bank Ltd.	Centurion Bank Of Punjab Ltd. [Merged]	25-02-2008
I C I C I Bank Ltd.	United Western Bank Ltd. [Merged]	04-09-2006
I D B I Bank Ltd.	I D B I Bank Ltd. [Merged]	20-01-2005
Indian Bank	Indfund Management Ltd. [Merged]	02-02-2012
Indian Overseas Bank	Bharat Overseas Bank Ltd. [Merged]	07-04-2007
Indusind Bank Ltd.	Indusind Enterprises & Finance Ltd. [Merged]	22-08-2002
Kotak Mahindra Bank Ltd.	I N G Vysya Bank Ltd. [Merged]	20-11-2014
Oriental Bank Of Commerce	Global Trust Bank Ltd. [Merged]	26-07-2004
Punjab National Bank	Nedungadi Bank Ltd. [Merged]	20-11-2002
State Bank Of India	State Bank Of Saurashtra [Merged]	26-08-2007
Vijaya Bank	Vibank Housing Finance Ltd.	16-06-2003

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