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Impact of Merger Announcements on Shareholders' Investments in India: Empirical Analysis in Selected Sectors

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***Abstract* - This study makes an attempt to estimate the impact of horizontal mergers and acquisitions that have taken place in eight selected banks/companies of five Indian private sectors. An event study methodology has been used to explore the effects on the investments of shareholders of the selected company mergers that have taken place during the period 2010 to 2018. This study of stock market valuation and estimation of effective, abnormal and cumulative average abnormal returns in the context of Indian horizontal mergers has shown interesting findings. The results indicate that the mergers and acquisitions in the banking sector have shown a positive impact on the investors of both Kotak Mahindra bank, the bidder bank and ING Vysya bank, the target bank. Further, in the case of pharmaceutical sector the M&A has shown a positive impact on the investors of both bidder company (Torrent Pharma) and the target company (Unichem Laboratories Ltd). In case of first merger considered under the steel sector and in the Oil &Gas industry (only one merger), the negative impact is found both on the investors of bidder and target companies.In the rest of the mergers considered for this study, mixed reaction of both positive and negative returns has been found. The findings of this study provide input to both the acquiring and the target company shareholders. The acquiring company tends to overbid for acquiring the target company, therefore this process mostly benefits the target company's shareholders at the cost of acquiring company shareholders. Hence, the management of the acquiring company should be vigilant.**
***Keywords:* Mergers and Acquisitions, Expected Returns, Abnormal Returns, Cumulative Abnormal Returns, Window Period, Clean Period, Target Companies and Bidder Companies, India**

I. INTRODUCTION

Pacing towards Mergers and Acquisitions (M&A) is an appealing way to combine two successful similar businesses. By M&A, the synergy influence of the two companies is combined to develop a business that is most suitable for the demand of the market and its stakeholders. A merger is a case where the acquired company purposely delivers its assets and liabilities in the hands of the acquiring company. As a result, the company being acquired can survive another stage of competition in the business cycle. But, the phenomena of merger and acquisitions of the two businesses would surely leave a positive or negative impact on its stakeholders. Due to the financial stress of the company being acquired the stakeholders may feel the off-putting impact and therefore it is obvious for the stakeholders to be nervous and uneasy at the kick-off of the initial phase of M&A. In the highly competitive global market, a company that does not continuously evolve to meet the strategic needs of the rapidly changing competitive landscape risks becoming obsolete. Thus Mergers and acquisitions (M&A) have become a widespread strategic choice for firms that want to acquire new resources to meet these fluctuating demands. The Mergers & Acquisitions may take place on different criteria like on the basis of the value chain (Horizontal M&A, Vertical M&A, and Conglomerate M&A), on the basis of economic area (Domestic M&A, Cross border M&A), on the basis of relationship (Hostile M&A, Bailout M &A etc.) and on the basis of strategic transactions.

For the improvement of economies of scale, greater efficiencies & operational synergies and to develop the access to new geographies and new products also, M&A are very beneficial. Bringing new technology and increasing the capability of further investment in technology are the main benefits of mergers and acquisitions. In bringing diversification, developing talent and expertise, mergers and acquisitions are significantly contributing. Besides the rise in national competitiveness, access to foreign capital and capital markets, increase in Foreign Direct Investments (FDI) & foreign exchange reserves etc. are the major benefits of it.

The Indian M&A landscape has witnessed several big ticket deals in the past few years. At a time when Indian business houses are constantly looking at inorganic growth through acquisitions of other businesses, the M&A arena appears stronger than ever before now. Recently, a lot of consolidation in the form of mergers, share acquisitions and business acquisitions has been observed in telecom, cement, banking, power and insurance.

The major driving factors for the increased M&A activity in the Indian scenario can be attributed to the macro-economic changes that were perhaps the result of the bankruptcy impending on the horizon at the beginning of the 1990s. In this context, it is interesting to note that Indian companies acquiring foreign businesses are more common than the other way round. Buoyant Indian economy, extra cash with Indian corporate houses, government policies and the dynamic attitude in Indian businessmen have contributed to

this new acquisition trend. Thus, it is believed that India has now emerged as one of the top countries entering into M&A.

II. REVIEW OF LITERATURE

Various researchers have attempted to estimate the impact of merger announcements on the shareholders and other key stakeholders of the company. Despite this, the insights that emerge from such research findings are conflicting. In this context, some of the important studies are reviewed as follows:

Siems (1996) and Datta, Pinches & Narayanan (1992) in their empirical studies proved that when similar companies acquire there was the negative impact of shareholders' wealth by acquiring company. However, the impact of shareholders' wealth of Target Company after the merger was found positive.

Rajesh Kumar and Prabina Rajib (2007) in their study explores that the acquirer firms with unused debt capacity can use mergers as a strategic business tool for gaining financial synergy. The study suggests that smaller firms with lower price-to-earnings ratio are more likely to be acquired. The acquired firms may also be undervalued by the stock market. There is a possibility that the acquirer firms with higher P/E ratios may get immediate gains from acquisitions of low P/E targets due to the market's tendency to value the combined firm at the acquirer's original price.

Manoj Anand and Jagandeep Singh (2008) in their study used an event study methodology to explore the effects on the wealth of the shareholders in five Indian private sector bank mergers during the period 1999 to 2005. From this study, it emerges that merger announcement in the Indian banking industry has shown a positive and significant impact on the shareholders' wealth of both the bidder and target banks.

Ramakrishnan (2008) study describes that on average, merging firms in India appears to have performed better financially after the merger when compared to their performance in the pre-merger period. Thus synergistic benefits appear to have accrued to the merged entities due to the transformation of the uncompetitive, fragmented nature of Indian firms before merger, into consolidated and operationally more viable business.

Chui (2011) made an attempt to use the M&A risk management model to identify and manage the risks arising from the M&A processes so as to maximize the probability of success in M&A by managing and reducing the risks that associated in the M&A activities.

Mallikarjunappa and Panduranga Nayak (2013) made an attempt to explain how the takeovers in India create wealth for the target company shareholders. It is evident from the study that the shareholders have earned the cumulative average abnormal return of 27-37 percent for an event window of 61 days surrounding the announcement of takeovers. An important reflection of this study is that both under raw returns and log returns, a major portion of Cumulative Average Abnormal Returns (CAARs) to target company shareholders is realized at or before the announcement date. It is believed that either there was a leakage of information to the market before the event day or the market anticipated the takeover announcement.

Neelam Rani, Surendra Yadav and Jain (2015) made an attempt in their study to examine how that an investor can earn substantial returns if he purchases the shares within five days before the news of M&A comes to the market and sells one day after the announcement. Further, this study concluded that an investor can also gain if the shares of the acquiring company are purchased two days prior to the announcement day and sold two days after the announcement day. The study also suggests that the Indian managers could adopt M&A as an effective strategy for corporate growth. The results also draw the attention of the managers about stock versus cash as a mode of payment to finance M&A. Issuance of shares is not as well as payment in cash as revealed in market reaction to acquisitions financed with stocks.

Abhinna Srivastava (2016) in his study concluded that though Horizontal merger like Sun Pharma and Ranbaxy gives rise to synergy power to both the companies, however, it appears that it has lots of negative impact on the acquiring company. This study suggests that the company should look every issue in a special way and take significant care towards the challenges ahead , especially in terms of future prospect of business, competition, investors value and most important its employees. From the above illustration, it is clear that all the studies are confined to only one specific sector/industry, and then there are no significant studies to estimate the impact of mergers and acquisitions on shareholders across various sectors in India. Thus, this present study makes an attempt to analyze the impact of a merger announcement of various sectors on the shareholders' wealth of the bidder and target companies in India. All the above studies have confined to mergers and acquisitions that have taken place in India in specific sectors, but there are no significant studies across different sectors.

Objectives of the Study: Against this background, the present study is broadly aimed to analyze the impact of merger announcement on shareholders' investments in selected private companies of different sectors in India. This study further makes an attempt to estimate the impact of mergers and acquisitions on the investors of bidder companies and target companies of selected sectors in India.

III. RESEARCH METHODOLOGY

For this purpose, eight (8) mergers in the Indian private sector companies (banking, steel, oil & gas, automobile and

pharmaceutical sectors) during the post liberalization period i.e., from 2010 to 2018 have been considered for this study. This study is mainly based on secondary data and the basic data on historical share price has been drawn mainly from www.yahoo.com, www.nseindia.com, www.investing.com and www.moneycontrol.com.

Sample Selection: The following listed companies in Indian NSE which followed Horizontal and domestic mergers across five sectors have been considered for this study. Selected eight M&A of these sectors are (Bidder & Target) are shown in Table I.

TABLE I SELECTED MERGERS IN DIFFERENT (5) SECTORS

Bidder	Target	Announcement Dates	Merger value in $ Mil
Banking Sector			
Kotak Mahindra	ING Vysya	20th November 2014	2400.87
ICICI	Bank of Rajasthan	18th May 2010	68.13
Pharmaceutical Sector			
Torrent Pharma	Unichem Laboratories Ltd	3rd November 2017	55.75
Sun Pharma	Ranbaxy Laboratories Ltd	6th April 2014	3225.51
Steel Sector			
Tata steel Ltd	Bhushan Steel Ltd	18th May 2018	517.26
JSW ISPAT	JSW Steel Ltd	1st September 2012	476
Automobile Sector			
Ashok Leyland	Hinduja Foundries	14th 2016 September	@
Oil & Gas Sector			
Vedanta	CAIRN India	14th June 2015	2156.08

@The Merger transaction value of Ashok Leyland and Hinduja Foundries has been taken in the form of shares and cash, since the exact value figures are not available.

Tools/Techniques Used: The first date of the media announcement of the merger has been taken as the event date (day zero). The first possible date when the news of the merger was made public has been considered. The same has been obtained from the news clippings and the information available on the web sites of the respective companies.

Event Window and Clean Period: The event window has been taken for -40 days before the event and 40 days after the announcement. The clean period data from the bidder banks has been taken as 250 days before the 40-day window period. Similarly, for the target banks, the share price data for 250 days before and 40 days after the 40-day window period (generally the share price data thereafter is not available) has been considered as the clean period data.

Expected Returns: The expected returns have been calculated (OLS method) using Intercept and Slope of previous 250 days' returns.

Estimating Cumulative Average Abnormal Returns (CAR) Using Single-Factor (Market) Model: The daily residual returns (r_{jt}) are estimated for each bidder and target bank/company in a 40-day window under the single-factor market model as follows:

$$r_{jt} = R_{jt} . (\alpha + \beta * R_{mt})$$

Where,

r_{jt} = Abnormal return for bank/company stock j at time t

R_{jt} = Actual return for bank/company stock j at time t

α = Ordinary Least Squares (OLS) estimate of the intercept of the market model regression

β = Ordinary least squares (OLS) estimate of the coefficient in the market model regression

R_{mt} = Return to the market (Nifty 50) at time t.

The daily average abnormal returns (AR_t) of merger announcement in a 40-day (40, +40) window are estimated for bidder bank groups and target bank groups by taking arithmetic average of the residual returns (r_{jt}) of the respective banks in that group.

$$AR_t = \sum_{J} r_{jt} / N$$

Where,

AR_t = Average abnormal returns of merger announcement

N = Number of firms in the bidder / target companies blocks (i.e., 8 each)

The Cumulative Average Abnormal Returns (CAAR) of merger announcement in a 40-day (-40, +40) window are estimated for bidder bank groups and target bank groups by summation of the average abnormal returns (AR_t) in the respective window.

$$CAR = \sum_{t=-40}^{t=40} AR_t$$

Where,

CAAR = Cumulative Average Abnormal Returns of merger announcement.

Statistical Significance of Event Returns: The null hypothesis that there are no abnormal returns associated with the merger announcement needs to be statistically tested. The statistical significance of the daily residual

returns of each company (r_{jt}), daily Average Abnormal Returns (AR_t) of bidder companies/target companies and cumulative abnormal return has been examined using the t-statistic. If the estimated value of the t-statistic is greater than 1.96 and less than 2.58, it is significant at 5 per cent level. In the event of the t-statistic being significant, it implies that there are abnormal returns associated with the bank merger announcements in India. The absolute wealth created as a result of the merger announcements for the shareholders of bidder and target banks has been estimated by multiplying the cumulative abnormal returns in the 1-day (-1,+1), 2-day (-2,+2), 5-day (-5,+5), 10-day (-10,+10), 15-day (-15,+15) and 40-day (-40,+40) window with the market capitalization on a day preceding the commencement of the respective window period.

IV. RESULTS AND DISCUSSION

The results of the present study using the market model with respect to the company's merger announcements are discussed in detail. Initially an attempt is made to analyze the results of bidder companies and subsequently the target companies considered for this study.

A. CAR of Bidder Companies and Target Companies Using Single-Factor Model: In this context, residual returns, Average Abnormal Returns, and the Cumulative Abnormal Returns and the summary statistics have been estimated using the single-factor model as shown in Table II and III.

TABLE II CAAR OF BIDDER COMPANIES

Event window		**0**	**(-1,+1)**	**(-2,+2)**	**(-5,+5)**	**(-10,+10)**	**(-15,+15)**	**(-20,+20)**	**(-40,+40)**
Companies									
Kotak Mahindra	ER	0.2866	0.265	0.306	0.1806	0.203	0.1892	0.199	0.1284
	AR	6.8015	3.068	1.283	0.068	0.26	0.258	0.37	0.195
	CAR	6.801	9.204	6.42	0.75	5.454	7.987	15.16	15.8
ICICI	ER	0.2508	-1.517	-1.188	-0.92	-0.258	-0.221	0.098	0.1404
	AR	-1.58	-1.81	-0.98	-0.27	-0.27	-0.3	-0.06	-0.1
	CAR	-1.58	-5.44	-4.91	-2.93	-5.75	-9.24	-2.38	-8.34
Torrent Pharma	ER	0.1852	-0.039	-0.041	-0.105	-0.061	0.0214	-0.05	-0.044
	AR	-0.856	0.542	0.025	-0.06	-0.38	0.052	0.1	0.206
	CAR	-0.856	1.627	0.12	-0.7	-8.05	1.616	4.287	16.72
Sun Pharma	ER	0.1203	0.285	0.188	0.0876	0.234	0.1707	0.248	0.2918
	AR	2.6905	2.555	1.161	0.695	0.096	0.118	-0.28	-0.24
	CAR	2.69	7.664	5.81	7.648	2.017	3.659	-11.4	-19.4
Tata Steel	ER	-1.215	-1.047	-0.722	-0.082	0.074	0.1501	0.159	0.2068
	AR	-1.931	-1.42	-0.91	-0.32	-0.28	-0.07	-0.31	-0.22
	CAR	-1.931	-4.25	-4.57	-3.55	-5.88	-2.24	-12.6	-17.9
JSW Ispat	ER	-0.087	-0.398	-0.374	-0.082	0.436	0.4281	0.465	0.2323
	AR	-3.225	-0.49	-0.64	-0.31	-0.58	-0.31	-0.22	0.006
	CAR	-3.225	-1.48	-3.19	-3.37	-12.3	-9.59	-9.05	0.467
Ashok Leyland	ER	0.0898	-0.56	-0.474	-0.079	0.08	0.0068	-0.02	-0.069
	AR	1.0422	-1.67	-1.1	0.046	-0.41	-0.21	-0.19	-0.05
	CAR	1.042	-5.02	-5.51	0.506	-8.58	-6.56	-7.74	-3.95
Vedanta	ER	0.28951	-1.961	-0.294	0.1078	-0.279	-0.152	-0.1	-0.216
	AR	-1.631	-1.96	-1.09	-0.42	-0.33	-0.51	-0.7	-0.33
	CAR	-1.631	-5.88	-5.44	-4.66	-7.03	-15.8	-28.8	-26.6

* ER = Expected Returns, AR = Abnormal Returns CAR = Cumulative Abnormal Returns

Firstly, the data of all the companies which have gone for a merger announcement for the year 2010 to year 2018 is taken. Then the daily prices, daily return, announcement dates of each selected bidder and target companies are considered. The abnormal return and the expected return of each stock on a daily basis are calculated. The expected return is a tool used to determine whether an investment has a positive or negative average net outcome. Expected return is usually based on historical data and is therefore not guaranteed; it is merely a long-term weighted average of historical return 2,5,10,15,20,40 days' window period as shown in Table2 Using the OLS method the expected returns have been calculated by using previous 250 days. After calculating the expected return, the expected return is

subtracted from the actual return and from this abnormal return for each stock for the entire 81 days (-40 days to +40 days) is obtained. Abnormal returns of individual companies are averaged for each day surrounding the selected days (i.e.., 1. After calculating the average abnormal return, the cumulative average abnormal returns using CAAR formulae for all previous event days till current event day are estimated.

B. Overall Bidder Companies: The Average Abnormal Returns (AARs) of overall bidder companies are found to be negative for 1 day to 40 days in the pre and post announcement date respectively. From the results as shown in Table II, it is evident that the highest AAR of -0.07% just 5 days prior to the zero date, followed by 0.163% on zero date. This shows that investors are not very much aware of the event. The upward trend in Expected Returns from -1 day to +1 day shows that investors anticipated their investments concerned with the merger announcement. The CAAR of overall bidder companies considered for this study are shown in Figure.1.

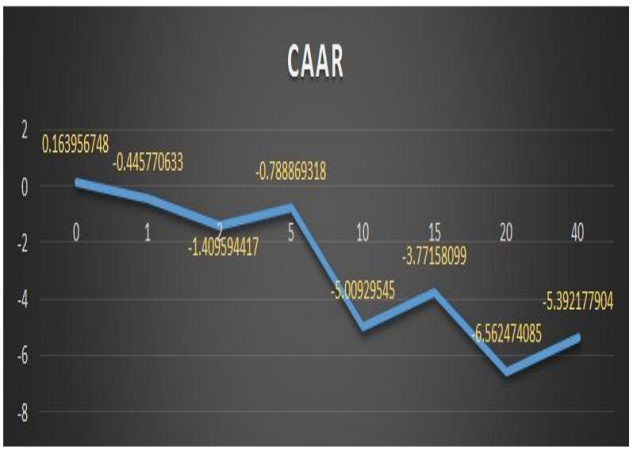

Fig. 1 CAAR - Overall bidder companies

TABLE III CAAR OF THE TARGET COMPANIES

Event window		0	(-1,+1)	(-2,+2)	(-5,+5)	(-10,+10)	(-15,+15)	(-20,+20)	(-40,+40)
Companies									
ING Vysya	ER	0.18573	0.1693	0.193	0.1117	0.116	0.0982	0.104	0.0778
	AR	7.3631	3.605	1.477	0.618	1.179	0.819	0.69	0.439
	CAR	7.363	10.81	7.38	6.803	24.76	25.38	28.1	35.55
Bank of Rajasthan	ER	0.30203	-0.947	-0.693	-0.451	0.0502	0.06436	0.2841	0.2809
	AR	17.89	14.36	10.74	6.414	3.63	2.192	1.95	1.077
	CAR	17.89	43.08	53.7	70.55	76.23	67.95	79.98	87.28
Unichem Laboratories	ER	0.19712	0.01867	0.0135	-0.026	-0.0087	0.05862	0.0023	0.0134
	AR	0.2014	-0.7	-0.59	0.501	0.725	0.501	0.38	0.331
	CAR	0.201	-2.1	-2.93	5.515	15.22	15.53	15.54	26.81
Ranbaxy Laboratories	ER	0.02760	0.35267	0.1468	-0.058	0.2219	0.10238	0.2562	0.339
	AR	-3.077	2.825	2.527	2.31	1.199	0.792	0.25	0.027
	CAR	-3.077	8.476	12.6	25.41	25.18	24.54	10.26	2.193
Bhushan Steel	ER	-1.2353	-1.130	-0.945	-0.536	-0.3892	-0.2994	-0.259	-0.1268
	AR	6.0511	5.945	5.748	3.726	3.401	0.818	0.08	-0.78
	CAR	6.051	17.84	28.7	40.98	71.41	25.35	3.15	-63.5
JSW ISPAT	ER	-0.2885	-0.566	-0.535	-0.317	0.126	0.1212	0.162	-0.03
	AR	-2.903	-0.32	-0.55	-0.2	-0.5	-0.27	-0.27	-0.13
	CAR	-2.903	-0.96	-2.73	-2.23	-10.6	-8.23	-11.1	-10.6
Hinduja Foundries	ER	0.34327	0.0253	0.049	0.2161	0.269	0.2166	0.188	0.1306
	AR	3.2699	-7.46	-8.33	-4.58	-2.49	-1.87	-1.38	-0.8
	CAR	3.27	-22.4	-41.7	-50.3	-52.3	-57.9	-56.7	-65.2
CARIN India	ER	0.15493	0.0936	-0.373	0.0017	-0.363	-0.265	-0.23	-0.318
	AR	3.6181	0.094	-0.23	-0.27	0.088	0.018	-0.13	-0.13
	CAR	3.618	0.281	-1.16	-3	1.847	0.569	-5.39	-10.9

C. Overall Target Companies: Figure 2 provides the CAAR of eight (8) targeted firms at different event days. The largest cumulative average abnormal return is shown as 18.96% on 10 days' event window, and the smallest average abnormal return finds 0.210% on 40 days' window period (Table III).

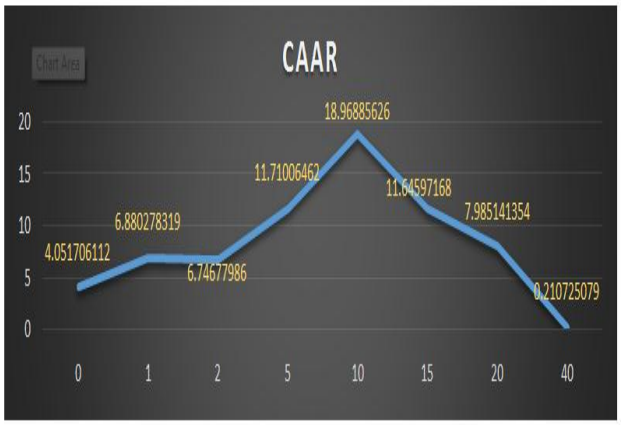

Fig. 2 CAAR - Overall Target Companies

The results of the bidder and target companies across the selected sectors after M&A are discussed as follows:

a. Banking Sector: The Cumulative Abnormal Returns of Kotak Mahindra and ING Vysya both consist of positive returns, while ING Vysya has shown very high positive returns which indicates high impact on the stock market returns. The CAAR of bidder bank ICICI have shown negative returns, but while the target Bank of Rajasthan has recorded positive returns, thus it is clear that the shareholders of the target bank have benefited from this merger.

b. Pharmaceutical Sector: The CAAR of both the bidder company (Torrent) and target company (Unichem Laboratories Ltd) are positive; therefore, it has shown significant impact on the stock market returns. However, the CAAR of the bidder company (Sun Pharma) have shown negative returns, whereas the target company (Ranbaxy) has recorded positive returns. Thus, it can be summed up that the shareholders of Target Company have benefited from this merger.

c. Steel Sector: The CAAR of bidder company, Tata Steel Ltd of both targeted companies and the target company, Bhushan Steel Ltd, which is an internal merger have recorded negative returns and the results were not significant at 5% level. However, in the second case ,the CAAR of bidder company, JSW Steel have shown negative returns, whereas the target company, JSW ISPAT has shown positive returns, hence it is evident that the shareholders of target company have benefited from this merger. In the first case of the steel sector, it is found that the M&A has created a negative impact on the investors of both the bidder (Tata Steel Ltd) and target (Bhushan Steel Ltd) companies. In the second case of M&A in the steel sector, a negative impact is found in the investors of JSW Steel, the bidder company but, it has shown positive impact on the investors of JAW ISPAT, the target company.

d. Automobile Sector: Though the CAAR on the announced date of bidder company, Ashok Leyland is -11.89%, it sequentially negative in the following days after the announcement. This means the negative impact on Cumulative average abnormal returns to bidding firms are weakening as time goes on. It can be mentioned that sometimes the stock performance cannot be quickly reacted on the announced date. Then the actual stock price will be made a reaction on the second day. In the automobile industry, the negative impact is found on the investors of Ashok Leyland the bidder company however, it has shown positive impact on the investors of Hinduja Foundries, the target company.

TABLE IV SUMMARY STATISTICS OF BIDDER COMPANIES

Bank/Company		Coefficients	Std. Error	T	Sig.
Kotak Mahindra	intercept	0.260796712	0.179767367	1.450745571	0.150809893
	Slope	0.95003443	0.198008972	4.797936273	7.43712E-06
ICICI	intercept	-0.028834475	0.14482801	-0.19909	0.84270027
	Slope	1.689400918	0.129330852	13.06263	1.9716E-21
Torrent Pharma	intercept	0.1022191	0.204458588	0.50094208	0.617805
	Slope	1.007729967	0.341987732	2.94668455	0.00422
Sun Pharma	intercept	0.016266243	0.2181626	0.07456018	0.9407531
	Slope	0.122582281	0.259958395	0.47154577	0.6385508
Tata Steel	intercept	-0.232455995	0.170868208	-1.36044029	0.177559766
	Slope	2.020684003	0.276132025	7.31781836	1.83309E-10
JSW Ispat	intercept	0.1341719	0.223062176	0.601500007	0.549229234
	Slope	1.128133877	0.266794036	4.228482365	6.27401E-05
Ashok Leyland	intercept	-0.039310268	0.216611196	0.181478468	0.856456852
	Slope	1.291257909	0.263867576	4.893583101	5.13135E-06
Vedanta	intercept	-0.518917056	0.247122672	2.099835885	0.038934836
	Slope	0.968827981	0.253210825	3.826171261	0.000258851

e. Oil & Gas Sector: Cumulative abnormal return to Vedanta bidding firm is found negative (- 0.5) during the event window (-5, +5). Therefore, the new information of mergers and acquisitions is not 'good' news for the both bidder and target companies in Oil & Gas. The investment of shareholders in bidder Company has to suffer a loss from the announcement of takeovers. Lastly, it is disappointing to note that the M&A in Oil & Gas Sector has created negative impact on the investors of Vedanta, Bidder Company and the CAIRN India, Target Company.

D. Summary Statistics: The summary statistics provide the details of regression results for estimating the expected return during the window period. Table IV and Table V present the summary statistics of bidder banks/companies and target banks/companies respectively.

TABLE V SUMMARY STATISTICS OF TARGET COMPANIES

Bank/Company		Coefficients	Std. Error	T	Sig.
ING Vysya	intercept	0.467144935	0.23013333	2.02988821	0.045734317
	Slope	0.750340971	0.25348574	2.96009144	0.004058523
Bank of Rajasthan	intercept	1.351374231	0.491797466	2.747827	0.007429678
	Slope	0.179325079	0.439173232	0.408324	0.684140291
Unichem Laboratories	intercept	0.257603431	0.210825186	1.22188167	0.225385846
	Slope	1.463401853	0.352636825	4.14988381	8.32703E-05
Ranbaxy Laboratories	intercept	0.398077514	0.250529264	1.58894617	0.116066923
	Slope	-0.107930962	0.298525895	-0.3615464	0.718656217
Bhushan Steel	intercept	-0.819563315	0.618099255	-1.325941277	0.188680275
	Slope	-0.843408741	0.998880955	-0.84435361	0.40102155
JSW ISPAT	intercept	-0.271303162	0.235738135	-1.150866668	0.253258619
	Slope	1.20516706	0.281955147	4.274321913	5.31208E-05
Hinduja Foundries	intercept	-0.611371843	0.466799834	-1.309708784	0.19409039
	Slope	1.031204438	0.568637923	1.813464063	0.07355795
Cairn India	intercept	-0.417182914	0.21335884	-1.955311128	0.054082653
	Slope	1.374498612	0.218615181	6.28729718	1.65998E-08

From the Tables IV & V, the regression results conclude that the intercept and coefficient of both bidder companies and target companies are found significant at 95% level (-1.96>= z <= 1.96).

V. CONCLUSION

This study makes an attempt to examine the impact of merger on the stock market valuation in the context of horizontal mergers that have taken place in five sectors. From the results, it emerges that merger announcement in the Indian banking, pharmaceutical, steel, automobile and Oil & Gas industry has shown both positive and negative returns to the shareholders' investments of both the bidder and target banks/companies.

The results indicate that the mergers and acquisitions in the banking sector have positive impact on the investors of both Kotak Mahindra bank, the bidder bank and ING Vysya bank, the target bank. But in the second case, mixed reaction is found by the investors of the bidder bank and the target bank. Similarly out of two cases considered in the pharmaceutical sector, only one M&A has shown a positive impact on the investors of both Bidder Company and the target company. .In case of the steel sector, it is found that the M&A has created a negative impact on the investors of both the bidder (Tata Steel Ltd) and target (Bhushan Steel Ltd) companies. In the automobile industry, the negative impact is shown on the investors of the bidder company; however, it has shown positive impact on the investors of the target company. But it is disappointing to note that the M&A in Oil & Gas Sector has created a negative impact on the investors of Vedanta, Bidder Company and the CAIRN India, Target Company.

From the entire analysis, it emerges that merger announcement in the Indian banking; pharmaceutical, steel, automobile industry has created a mixed reaction on the shareholders' investments of both the bidder and target banks/companies. Finally, it can be concluded that out of eight mergers considered for this study, the investors of only two bidder companies have benefited, but the investors of six target companies have been benefited.

The findings of this study provide input to both the bidder and the target company shareholders. The acquiring company tends to overbid for acquiring the target company and in the process benefits the target company shareholders at the cost of acquiring company shareholders. Thus, the management of the acquiring company should be cautious.

Similarly, the takeovers offer an opportunity to shareholders of target companies and general investors to make profits both in the period before and after the announcement of the takeover bid by going long on the target company stocks.

The practical implication of the study is that there is a large and significantly positive effect on the investments of shareholders of the target company in response to the announcement of takeovers. This indicates that takeovers are being perceived by the capital markets as important tools for improving the performance of target shareholders by changing the target company management.

REFERENCES

[1] Abhinn Baxi Bhatnagar & Nitu Sinha (2012) , Strategic move of ICICI bank: a case study of merger of ICICI bank and bank of Rajasthan, *International Journal of Multidisciplinary Research*, *2*(5), 195-207, Retrieved from http://www.Zenithresearch.org.in/ images/ stories/pdf/2012/May/ ZIJMR/18_ZIJMR_Vol2_Issue5_May%202012.pdf

[2] Abhinna Srivastava (2016), Opportunities and threats of mega merger: A case study of Sun Pharmaceuticals and Ranbaxy laboratories, *International Journal of Commerce and Management Research*, *2*(8),112-115, Retrieved from www.managejournal.com

[3] Chui. B. S, A (2011), Risk Management Model for Merger and Acquisition Sage International Group Limited, Hong Kong, *International Journal of Engineering Business Management*, *3*(2), 37-44, Retrieved from https://hrcak.srce.hr/file/106482

[4] Datta, D.K., Pinches, G.E., & Narayanan, V.K., (1992), Factors Influencing Wealth Creation from Mergers and Acquisitions: A Meta-Analysis. *Strategic Management Journal*,*13*, 67-84, Retrieved from https://www.jstor.org/stable/2486611

[5] Mallikarjunappa.T & Panduranga Nayak (2013), A Study of Wealth Effects of Takeover Announcements in India on Target Company Shareholders, *Vikalpa*, *38*(3), 23-49, Retrieved from: www.vikalpa.com/pdf/articles/2013/pages-vikalpa-383-23-50.pd

[6] Manoj Anand & Jagandeep Singh (2008), Impact of Merger Announcements on Shareholders. Wealth: Evidence from Indian Private Sector Banks, *Vikalpa*, *33*(1), 35-54, Retrieved from https://journals.sagepub.com/doi/10.1177/02560909 20080103

[7] Neelam Rani, Surendra S Yadav, & P K Jain (2015), Impact of Mergers and Acquisitions on Shareholders' Wealth in the Short Run: An Event Study Approach, *Vikalpa*, *40*(3), 293-312, Retrieved from: https://doi.org/10.1177% 2F02 56090915600842

[8] Rajesh Kumar. B & Prabina Rajib (2007), Characteristics of Merging Firms in India: An Empirical Examination, *Vikalpa*, *32*(1), 27-44, Retrieved from: https://doi.org/10.1177%2F0256090920070103

[9] Ramakrishnan. K (2008), Long-term Post-Merger Performance of Firms in India, *Vikalpa*, 33(2), 47-63, Retrieved from: http://www.vikalpa.com/pdf/ articles/2008/V33204-047to063.pdf

[10] Siems. T. F (1996). Bank Mergers and Shareholder Wealth: Evidence from 1995S. Mega Merger Deals, *Financial Industry Studies of the Federal Reserve Bank of Dallas*, *8*, 1-12, Retrieved from https://fraser.stlouisfed.org/files/docs/historical/frbdal/finindstudies/fiss1997-12.pdf