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BEHAVIOUR OF STOCK PRICE AND VALUE EFFECT OF MERGERS & ACQUISITIONS – A STUDY OF SELECTED FIRMS IN INDIA

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Abstract

There is no secret that the track of Mergers and Acquisitions has been dismal. Even though several decades corporate acquirers have been most important element of corporate synergy in all over globe. This research paper intends to evolve the trend in corporate integration through selected Mergers and Acquisitions of Indian companies. The literature review on Mergers and Acquisitions has not been able to reveal conclusive evidence about the impact of Mergers and Acquisitions. This research paper covers the sample of eight companies which came through corporate Merger and Acquisition phase in India during the year- 2009. The present study is an attempt to evaluate the impact on share prices in pre and post period of Mergers and Acquisitions. The study results with Mergers and Acquisitions enhance efficiency or not in after the life of integration. The share price has been observed through event study. The overall outcomes indicate that corporate blendings positively affect the share price of bidding firms in post period of Merger and Acquisition activity. The scope of the study limited to selected companies in India.

Key words: Mergers and Acquisitions, Share prices, Value effect.

INTRODUCTION

Presently, the global business environment is undergoing significant changes in respect of competition, technology, market etc. when a company has a profit and reserve funds, it may use them in various investment plans, it may returns to equity shareholders by providing special dividends, investment in additional projects, increase the percentage of liquidity or implement schemes for expansion, modernisation, renovation on a intention to create more economies of scale.

There are two keys to success of mergers and acquisitions. The first is calculating synergy value of target firms by work with realistic assumptions. The second is ensuring that the acquirer pays no more than those realistic calculated bidding values. From past 30 years of evidence resulted that most of mergers and acquisitions does not impact on create value for bidding firms because of acquiring company paid too much in most of the times.

Always acquirer should aware of the realistic value of the target firms and make an attempt to bid with equivalent of absolute value rather than, they pay more than the acquisition worth of target firms. Mergers and acquisitions have gained more importance throughout the globe due to the LPG, technical innovations and intensive growth in business environment. The Global competition leads to promote Indian companies to go for corporate combination as a significant strategy to grow and survival.

TRENDS OF MERGERS AND ACQUISITIONS IN INDIA

In recent years, corporate integration becomes common in India. The authors observed a systematic way of arrears at it, involving distinct value concepts. In present market, the bidding price of mergers and acquisitions will nearly always be greater than the intrinsic value of the target company. The prices of bidding firm share before any acquisition intentions are announced. The key is to resolve how much of the difference “synergy value”. The value that will outcome from enhancement made when the firms are blended.

Presently, increasing in the shareholders wealth is generally prime objective of the most of corporate integration. The wealth of equity shareholders through mergers and acquisitions could be increased the cost or cutting the cost by consolidating similar assets in the merging firms or by improving the revenue by concentrating on enhancing capabilities and revenues, and blending complementary competencies. However, most of the research on the impact of mergers and acquisitions on share holder’s value creation disclose that on an average, corporate integration provide constant returns to the target companies share holders rather than bidders shareholders on consulting. Various valuation consulting firms have also estimates that from 1/2 to 2/3 of corporate integration do not come up to the value expectations of those transacting them and may perform in divestitures.

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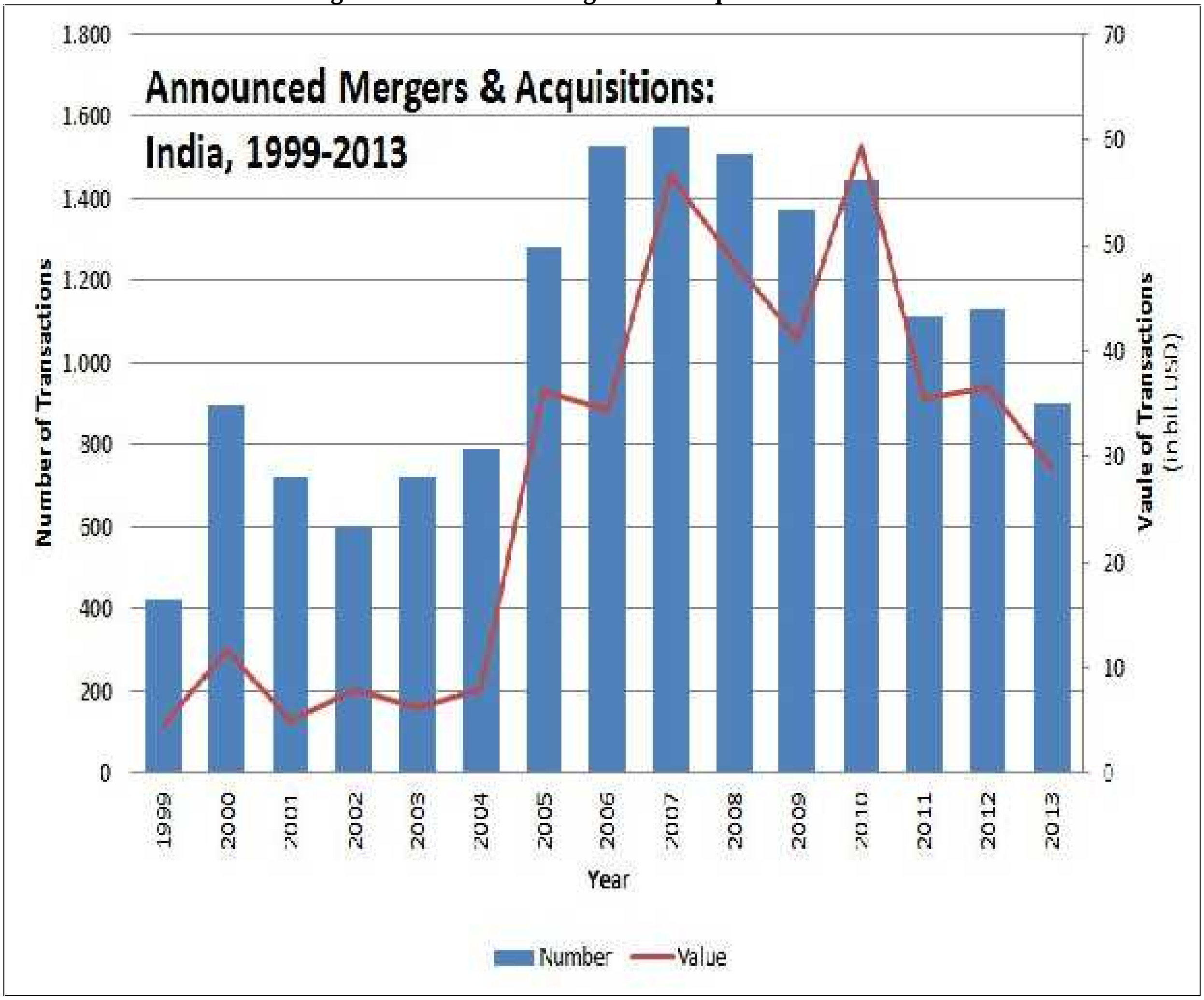
Figure – 1Volume of mergers and acquisition in India



Source: IMAA Database

THEORETICAL BACKGROUND

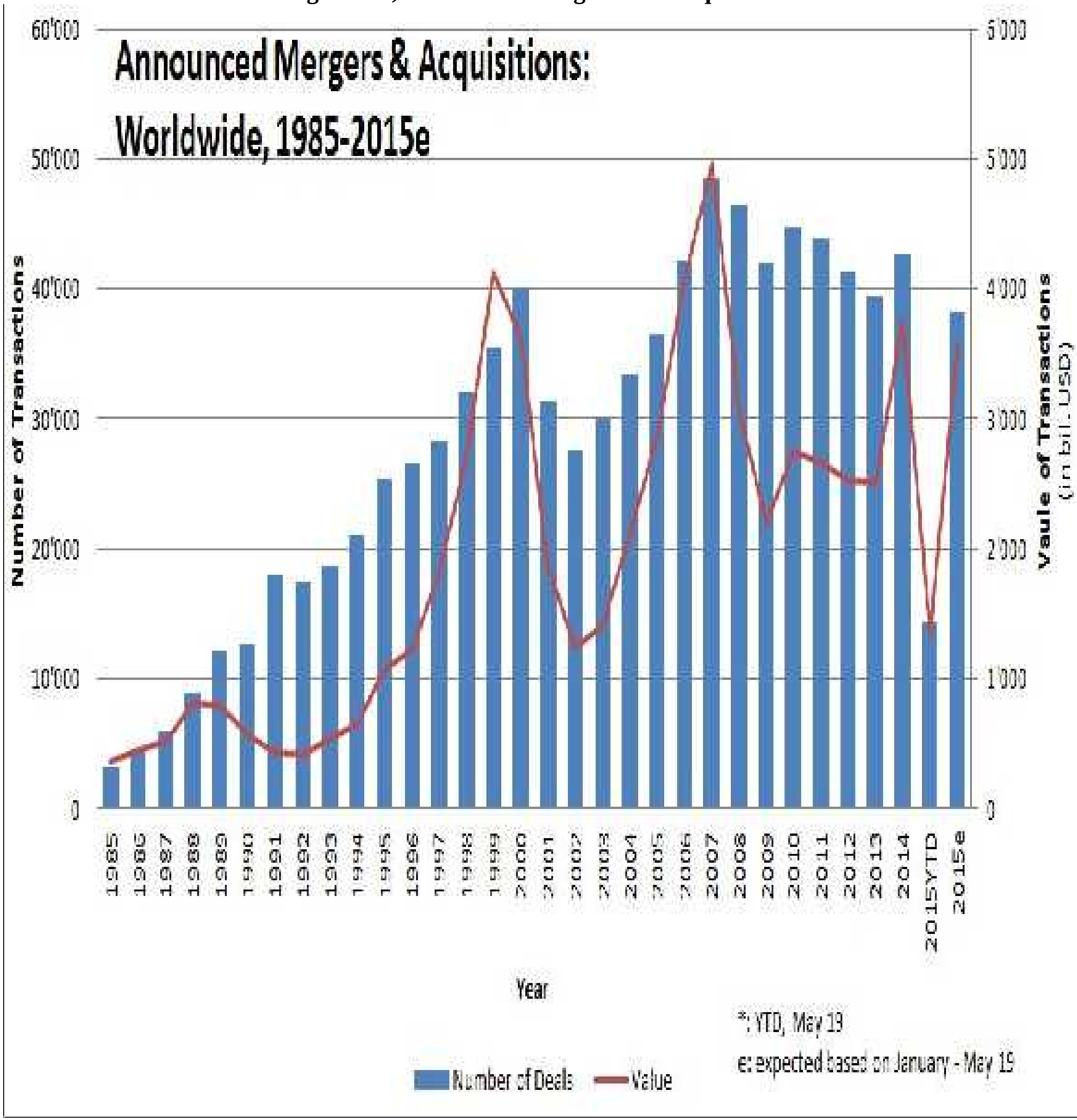
Pawaskar (2001) found that the shareholders of the bidding firm increase their liquidity performance in post period of mergers and acquisitions. Kumar and Rajib (2007) observe the impact on the shareholders' value in post mergers and acquisitions using the accounting measures. Tambi (2005) shows that long run corporate integration provides economies of scale or synergy.

Agarwal , Jaffe, Mandelkar (1992) observed that the shareholders of the bidder's firm experience a statistically significant value loss after the span of mergers and acquisitions activity. Engel, moore, woodliff (2003) found that over the long run, post period of mergers and acquisitions bidding firms earns lower returns compare to those earning in pre- period of mergers and acquisitions activity, but performance remains good, on average. Many studies have been done made on the effect of mergers and acquisitions on the share prices and value effect. There is no judgemental evidence about the impact of corporate integration. So the study helps to evaluate the share price volatility and value effect in pre and post period of mergers and acquisitions.

REVIEW OF LITERATURE

The role of corporate integration is important nature for management of acquired firms as well as acquiring firms. It has been identified and disclosed through various studies that found favourable in pre merger feasibility studies. Positive impact of corporate integration on the value of the firm when deal of corporate bindings is announced has also found by Ottone and Mourgin (2000).

Figure – 2, Worldwide Mergers and Acquisitions



Source: IMAA Database

Figure – 2 shows the volume and number of mergers and acquisitions deals incurred throughout the world. Grant Thornton reported 56% of Indian mergers and acquisitions transactions declined in quarter 3 – 2011. American research conducted in 2003 shows that 70% of corporate bindings do not reach the main goal which is the growth of the firm value. Seleni.L and colvin (2003) corporate integration are similar corporate activities which combine two separate entities into a dingle statutory entity. In some cases, terming the blending a “merger” rather than amalgamation is done for political and marketing reasons. In a merger of two entities, the shareholders usually have their shares in the existing company for an equal number of shareholders in the merged firm Brigham, Houston (2002). Fuller, Netter and Stegemoller (2002) observed that the acquirer’s shareholders gain when buying a private firm or subsidiary but when purchasing a non private firm. Higher return larger the acquiring and acquirer’s offers stock.

Sreedhar T. Bharath and Guojun WU (2005) evaluating the volatility and risk of bidders around corporate integration and found systematic volatility in the long term. Impact of corporate integration activity in the shape of earnings abnormal returns by bidding firm after bidding the other one is found absent. i.e corporate synergies expected from the announcement date of corporate integration are not practically realised by the bidding firm after the mergers and acquisitions. king et.al (2003)

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While in review of literature, several studies had done to analyse and understand the share market fluctuation to the announcement made by firms like bonus issue, distribution of dividend, share splits, capital structure decision and even the impact of mergers and acquisitions on behaviour of stock price and value effect by using event study.

RESEARCH METHODOLOGY

The study is to examine of value effect and behaviour of stock price of acquired firm. The following two hypothesis statements are tested using stock price of acquired firms compound annual growth rate (CAGR) and T-test.

Sample and Sampling Technique

Convenient sampling technique is used to identify selected mergers and acquisitions. This study is focus on reaction of share prices on mergers and acquisition activities. Table -1 represents selected mergers and acquisition transaction incurred in year 2011 consists of eight Indian bidders firms listed in BSE/NSE.

Table – 1 Selected Mergers and Acquisitions in the 2011

Sl .no	Bidding firm	Target firm	Deal Value	Type of activity
1	Reliance Industries Ltd	British Petroleum	7.2 bill	Acquisition
2	Fortis Healthcare (India) Ltd	Fortis Healthcare International Pvt Ltd	696 mill	Merger
3	GVK Power	Hancock Coal	1.26 bill	Acquisition
4	Essar Energy	Stanlow Refinery of Shell	350 mill	Acquisition
5	Aditya Birla Group	Columbian Chemicals	875 mill	Acquisition
6	Mahindra & Mahindra	Ssangyong Motor Company Limited (SYMC)	463 mill	Acquisition
7	The Vedanta	Cairn	8.6 bill	Acquisition
8	Adani Enterprises	Abbot Point Coal	1.9 bill	Acquisition

Source: Trak.in (Adopted by Grant Thornton report)

Hypotheses

1. H_0: There is no significant difference between behaviour of stock price in pre and post period of mergers and acquisitions.
2. $H_{0:}$ There is no significant difference between value effect after the period of mergers and acquisitions.

Mode of specification

Compound Annual Growth Rate (CAGR): to determine an annual growth rate in pre and post merger and acquisition stock price.

The T-test is used to determine the pre and post performance of an activity. The stock price of acquired firm's CAGR data applied to paired t-test for examining the hypotheses using SPSS software.

Decision rule

If the probability of the t-test calculated value is less than 5% significance level, reject null hypotheses.

Data and their source

The data used for the study were collected from IMAA (Institute of Mergers, Acquisitions and Alliances) with focus on mergers and acquisitions activity in India during the year 2011. The stock price and the related financial information gathered through various articles, journals, newspaper, and related internet sites. Therefore this study is mainly depends on secondary source of data.

Data summary & time period of the study

Based on transaction occurring year 2011 considered as neutral year, 2007 to 2010 considered as pre – acquisition period and from 2012 to 2015 considered as post- acquisition period. The following table consist of year on year (YOY) share price of bidding firm in both pre and post acquisition period. The analysis is depending on Compounded Annual Growth Rate (CAGR) of share price of bidding firms.

Table – 2 Compound Annual Growth Rate for Share price of selected companies

Bidder's Name	2007	2008	2009	2010	2011	2012	2013	2014	2015
M&M	76.91	-4.52	-67.40	283.26	43.88	-12.28	38	0.67	30.46
RIL	42.79	124.12	-55.97	73.80	-2.86	-34.52	21.32	5.72	-0.07
FHL	0	10.7	-36.59	94.80	7.24	-42.82	37.09	-11.44	10.41
GVKI	-5.42	186.13	-72.78	107.74	-13.15	-70.04	14.72	-33.22	-7.48
ABG	-34.89	98.79	-62.34	156.41	61.75	-48.65	42.12	9.93	95.44
TV	39.30	174.54	-52.15	343.26	39.95	-50.19	22.11	1.69	8.52
EE	30.19	528.87	-72.88	50.19	-1.47	-63.62	42.61	-24	97.88
AE	286.15	428.94	-74.01	178.19	48.87	-54.77	-6.06	-2.57	82.07

Mergers and Acquisitions: Share Price Analysis

Figure – 3 , Share price of Mahindra and Mahindra Ltd From 2007 to 2010(Pre- Acquisition Period)

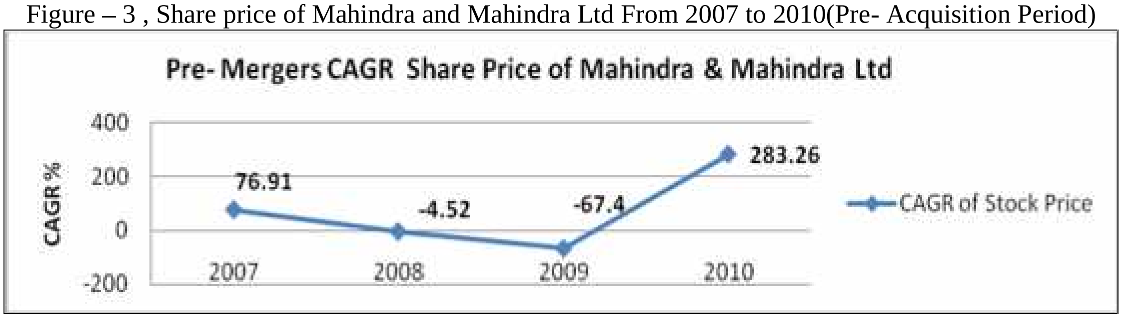
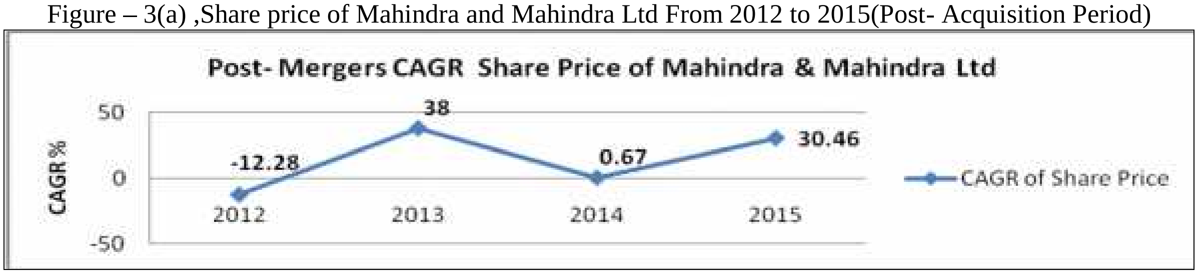


Figure – 3(a) ,Share price of Mahindra and Mahindra Ltd From 2012 to 2015(Post- Acquisition Period)



- Mahindra and Mahindra Ltd has occurred positive change in the share price in post-acquisition period.
- Further, the analysis result that volatility is more in pre-acquisition compared to post acquisition period.

Figure – 4,Share price of Reliance Industries Ltd From 2007 to 2010(Pre- Acquisition Period)

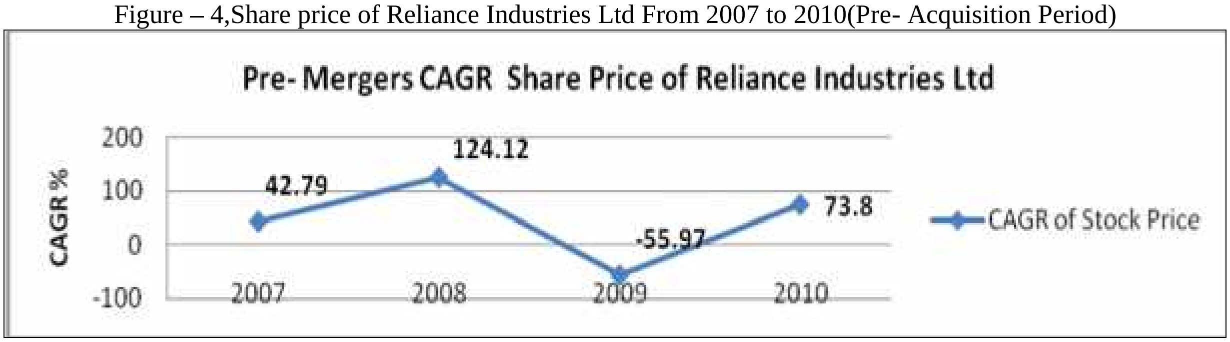
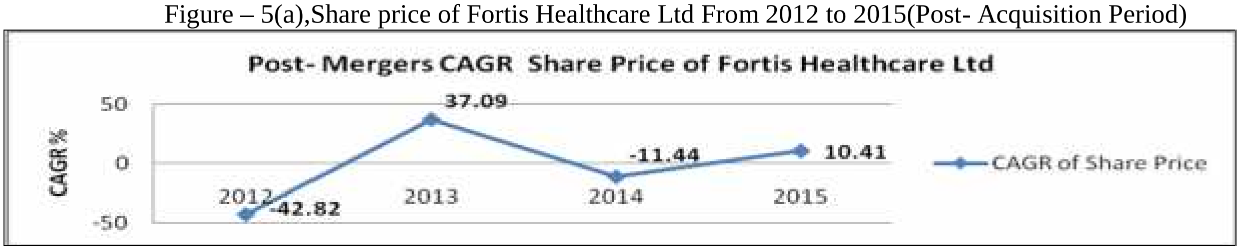


Figure – 4(a),Share price of Reliance Industries Ltd From 2012 to 2015(Post- Acquisition Period)

- Reliance Industries Ltd has occurred negative change in the share price in post-acquisition period.
- Further, the analysis result that declining trend in post-acquisition compared to pre-acquisition period.

Figure – 5,Share price of Fortis Healthcare Ltd From 2007 to 2010(Pre- Acquisition Period)

Figure – 5(a),Share price of Fortis Healthcare Ltd From 2012 to 2015(Post- Acquisition Period)



- Fortis Healthcare Ltd has occurred negative change in the share price in post acquisition period.
- Further, the analysis result that volatility is more in post acquisition compared to pre acquisition period.

Figure – 6,Share price of GVK Infrastructure Ltd From 2007 to 2010(Pre- Acquisition Period)

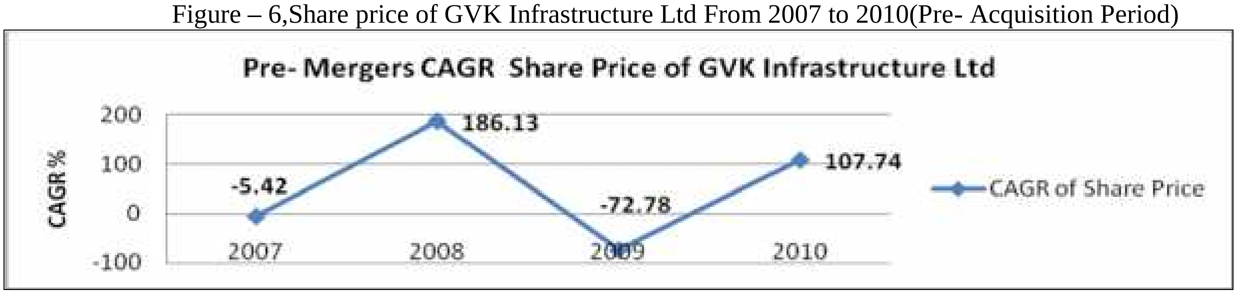
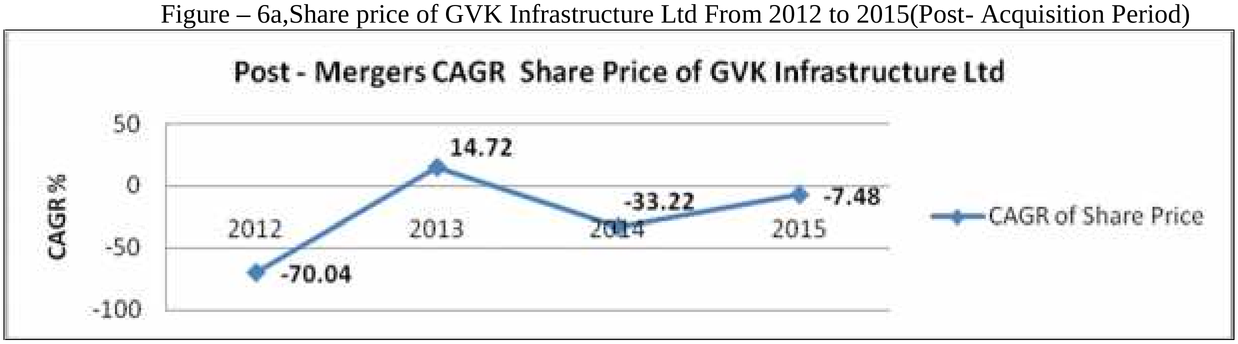


Figure – 6a,Share price of GVK Infrastructure Ltd From 2012 to 2015(Post- Acquisition Period)



- GVK Infrastructure Ltd has occurred negative change in the share price in post acquisition period.
- Further, the analysis result that volatility is more in pre acquisition compared to post acquisition period.

Figure – 7, Share price of Anitha Birla From 2007 to 2010(Pre- Acquisition Period)

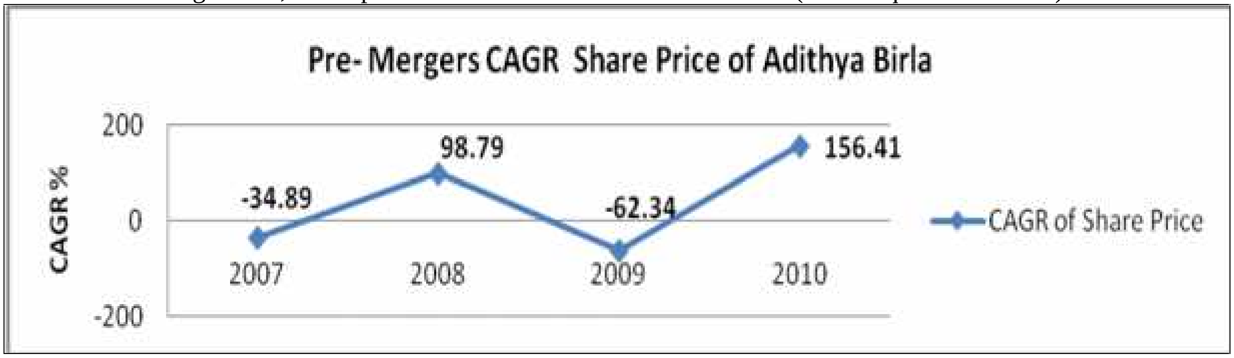
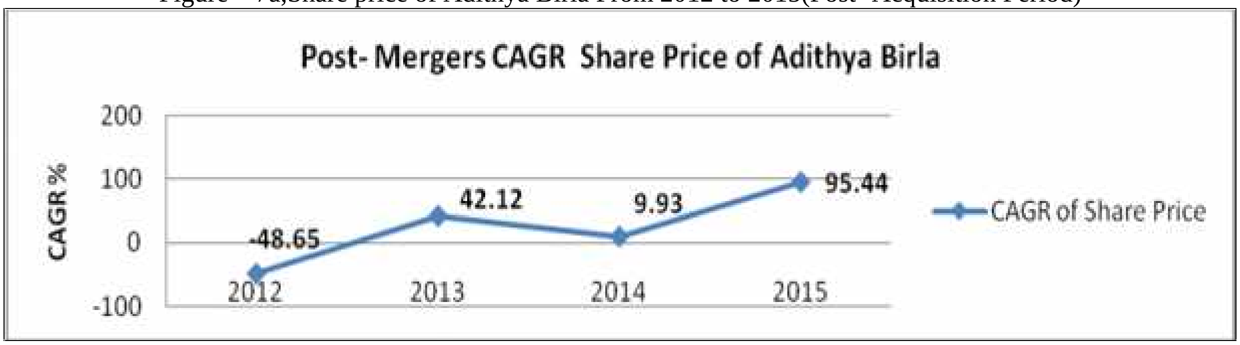


Figure – 7a,Share price of Adithya Birla From 2012 to 2015(Post- Acquisition Period)



- Adithya Birla has occurred positive change in the share price in post acquisition period.
- Further, the analysis result that volatility is more in pre acquisition compared to post acquisition period.

Figure – 8, Share price of The Vedanta From 2007 to 2010(Pre- Acquisition Period)

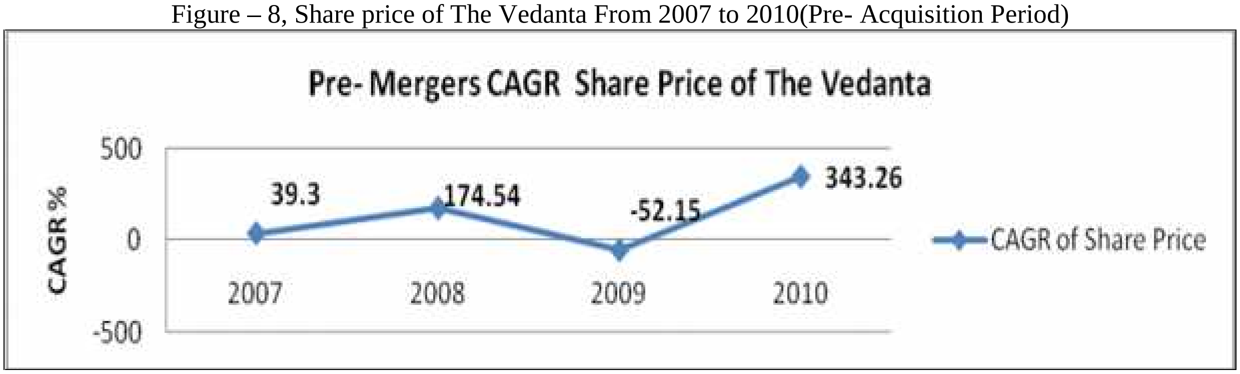
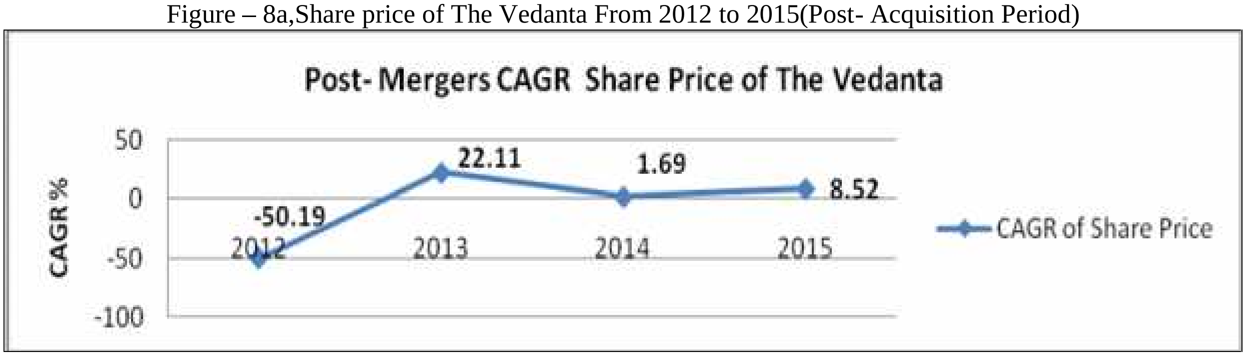


Figure – 8a,Share price of The Vedanta From 2012 to 2015(Post- Acquisition Period)



- The Vedanta has not occurred proportionate changes in the share price in post acquisition period.
- Further, the analysis result that declining trend in post acquisition compared to pre acquisition period.

Figure – 9,Share price of Essar Energy From 2007 to 2010(Pre- Acquisition Period)

Figure – 9a, Share price of Essar Energy From 2012 to 2015(Post- Acquisition Period)

- Essar Energy has occurred negative change in the share price in post acquisition period.
- Further, the analysis result that volatility is more in pre acquisition compared to post acquisition period.

Figure – 10, Share price of Adani Enterprises From 2007 to 2010(Pre- Acquisition Period)

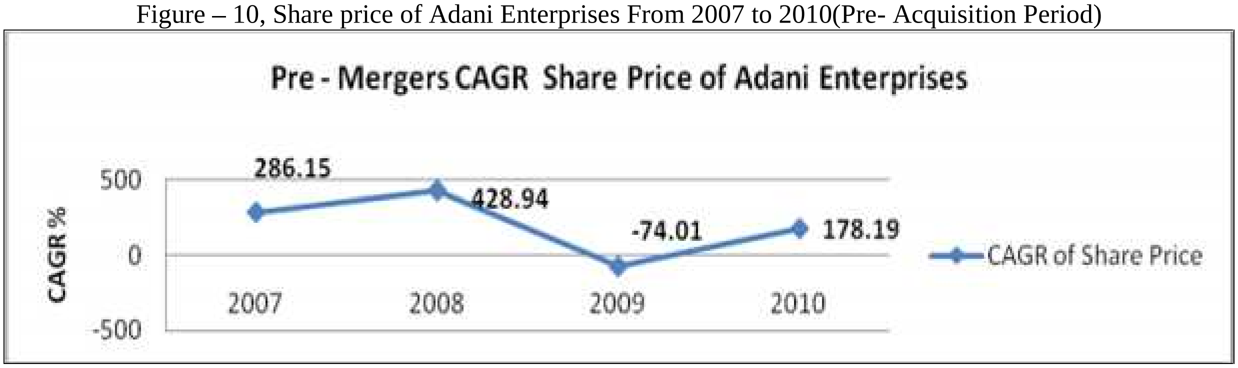
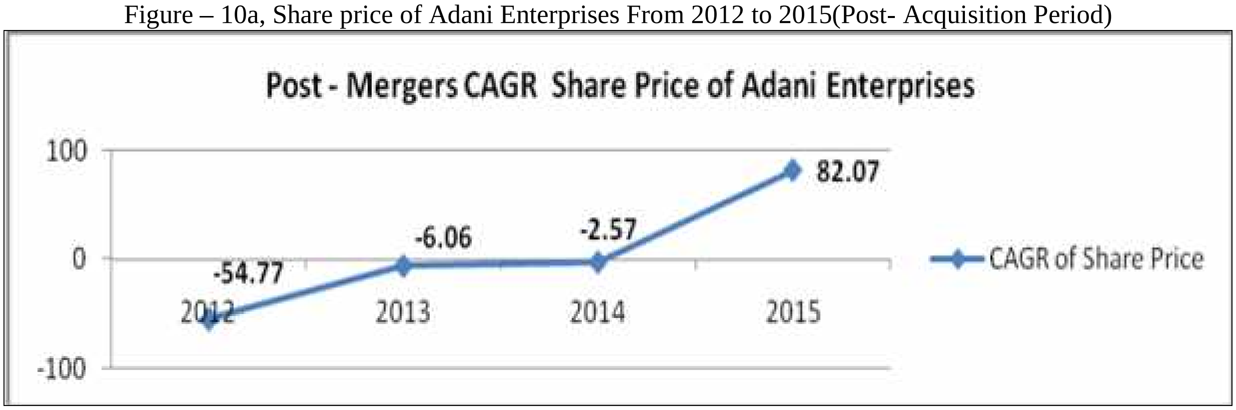


Figure – 10a, Share price of Adani Enterprises From 2012 to 2015(Post- Acquisition Period)



- Adani Enterprises has occurred negative change in the share price in post acquisition period.
- Further, the analysis result that volatility is more in post acquisition compared to pre acquisition period.

RESULTS AND INTERPRETATION

Table – 3,Paired t-test results of bidder's share price CAGR

	Pre(4years before Mean)	Post(4 years after Mean)	Pre	Post		
M&M	72.06	14.21	152.69	23.91	0.787	0.489
RIL	46.19	-1.89	75.90	23.55	1.294	0.286
FHL	17.23	-1.69	55.54	33.85	0.536	0.696
GVKI	53.92	-24	115.39	36.4	1.758	0.181
AB	39.49	24.71	105.02	60.29	0.472	0.665
TV	126.24	-4.54	172.06	31.79	1.624	0.203
EE	134.09	13.22	268.65	71.46	0.957	0.409
AE	204.82	4.67	212.37	56.84	1.736	0.181

Source: Author calculation from SPSS.

Table – 4Paired t-test results of bidder's share price

	Pre(4years before Mean)	Post(4 years after Mean)	Pre	Post		
M&M	366.7	952.03	222.12	226	-4.076	0.027
RIL	943.74	827.58	386.04	92.56	0.638	0.569
FHL	104.41	103.25	27.54	14.13	0.932	0.093
GVKI	46.70	11.38	27.89	2.57	2.679	0.075
AB	64.13	127.19	28.67	64.72	-2.291	0.106
TV	109.64	195.54	88.80	23.73	-2.383	0.097
EE	157.60	70.83	128.45	26.10	1.398	0.256
AE	327.53	331.86	232.74	105.41	-0.038	0.972

Source: Author calculation from SPSS

Table – 5,Overall paired t-test results

	Pre(4years before Mean)	Post(4 years after Mean)	Pre	Post		
CAGR	86.75	3.08	152.50	42.46	3.227	0.003
Share Price	256.06	327.46	328.07	353.96	-1.309	0.200

Source: Author calculation from SPSS

The comparison of the pre and post CAGR share price for the entire selected mergers and acquisitions showed that there was a decrease in the mean CAGR share price (86.75% to 3.08 %) but the decline was statistically significant (p-value is less than significance level at 5%). there was an increase in share price (256.06 to 327.46) but increase was not statistically significant. The results suggested that behaviour of the stock price of selected mergers and acquisitions had increased positively, as there is a increase in the share price in post-acquisition period. Based on results of the analysis the null hypothesis (H_0: There is no significant difference between behaviour of stock price in pre and post period of mergers and acquisitions) is accepted. It indicated there is no improvement in share price through mergers and acquisitions activity.

However the analysis of CAGR share prices of bidding firms, suggested that during the post-acquisition period annual growth has decreased and this decrease has been statistically significant. Therefore the null hypothesis $H_{0:}$ There is no significant difference between value effect after the period of mergers and acquisitions is rejected.

CONCLUSION

The result of the study shows that CAGR of share price is significant but negative and post-acquisition share price has increased but statistically not significant. From the above study it is found that acquiring firm are not getting a proportionate increase in returns in terms of compounded annual growth rate. Therefore acquiring firms shareholders failed to get abnormal returns. Furthermore, it could be very useful if further study focus on analysing of other factors like EPS, P/E ratio, ROE, ROI etc in connection to maximise the return to shareholders as well as firm's returns.

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