

Chapter – 6

ANALYSIS OF THE EFFECT OF ACQUISITION ANNOUNCEMENT ON SHARE PRICE OF THE COMPANIES

Chapter Contents

6.1	INTRODUCTION	239
6.2	EMPIRICAL RESULTS OF THE STUDY OF THE EFFECT OF ACQUISITION ANNOUNCEMENT ON SHARE PRICE OF THE INDIVIDUAL SAMPLE COMPANIES	242
6.3	SUMMARY OF RESULTS	312
6.4	EMPIRICAL RESULTS OF AVERAGE ABNORMAL RETURN, CUMULATIVE AVERAGE ABNORMAL RETURN AND t TEST ON AVERAGE ABNORMAL RETURN FOR ALL SAMPLE COMPANIES.....	320
6.5	EMPIRICAL RESULTS OF CAAR AND t TEST ON CAAR FOR SELECTED EVENT WINDOWS	323
6.6	CONCLUSION	324
	REFERENCES	326

CHAPTER 6

ANALYSIS OF THE EFFECT OF ACQUISITION ON SHARE PRICE OF THE SAMPLE COMPANIES

6.1 INTRODUCTION

The previous chapter analysed the impact of acquisition on long term performance of the acquirer. As mentioned in the objectives and research methodology, this study also intends to examine the impact of acquisition, on share price of the acquirer. This chapter attempts to examine the impact of acquisition on share price of the acquirer, company by company. As mentioned in the Chapter 4, this is examined applying the Event Study Methodology. Using the data of security prices from financial market, event study measures the impact of a specific event on value of the firm. The usefulness of such a study comes from the fact that, given rationality in the marketplace, the effect of an event will be reflected immediately in security prices¹. Thus, whenever researcher wants to measure the impact of event on short run it is done through event studies by using security prices. The event study has applications in many fields. In accounting and finance research, event studies have been applied to a variety of firm specific and economy wide events. In the majority of applications, the focus is the effect of an event on the price of a particular class of securities of the firm, most often equity shares.

This chapter discusses the empirical results pertaining to the effect of acquisition announcement on share price of the selected sample acquirer companies. As mentioned in the research methodology the acquisitions that took place in the year 2007 and 2008 were considered for using the event study methodology. Out of total sample of 66 firms selected for long term analysis in Chapter 5, the required data were available for only 51 companies and hence event study methodology is applied to only 51 acquirer companies.

The details of the companies selected as sample is given in Table 6.1 along with their respective date of acquisition (*i.e.* Event Date):

Table 6.1 Event Dates of Sample Acquirer Companies

Sr No.	Name of the acquirer company	Event Date
1.	ABG Shipyard Ltd.	25 th May 2007
2.	Accel Fortline Ltd.*	23 rd January 2007
3.	Advanta Ltd.*	1 st June 2007
4.	Aegis Logistics Ltd.	28 th March 2007
5.	Aftek Ltd.*	6 th June 2007
6.	Apollo Tyres Ltd.	17 th August 2007
7.	Aurobindo Pharma Ltd.*	21 st June 2007
8.	Autoline Industries Ltd.	25 th October 2007
9.	Bharat Heavy Electricals Ltd.	18 th April 2007
10.	Bodal Chemicals Ltd.	18 th June 2007
11.	Bombay Burma Trading Corp. Ltd.	12 th February 2007
12.	Carborundum Universal Ltd.	1 st April 2007
13.	Century Plyboards India Ltd.	2 nd June 2007
14.	Cranes Softwares International Ltd.	19 th June 2007
15.	Dollex Industries Ltd.*	4 th September 2007
16.	Epic Energy Ltd.	12 th June 2007
17.	Exide Industries Ltd.	31 st October 2007
18.	Fortis Healthcare Ltd.*	5 th April 2007
19.	GMR Infrastructures Ltd.	28 th May 2007
20.	Godrej Properties Ltd.	23 rd July 2007
21.	Heritage Foods (India) Ltd.	7 th September 2007
22.	Indoco Remedies Ltd	28 st September 2007
23.	Jet Airways (India) Ltd.	20 th April 2007
24.	Kirloskar Brothers Ltd.	11 th September 2007
25.	Kovai Medical Center & Hospital Ltd.	22 nd March 2007
26.	Lupin Ltd.	27 th September 2007
27.	Modern India Ltd.	2 nd July 2007
28.	Nexsoft Infotel Ltd.*	17 th April 2007
29.	Nilkamal Ltd.	27 th June 2007
30.	Pidilite Industries Ltd.	12 th December 2007
31.	Pioneer Embroideries Ltd.*	21 st September 2007
32.	Satra Properties India Ltd.	4 th July 2007
33.	S Kumars Nationwide Ltd.	30 th June 2007
34.	Sona Koyo Steering Systems Ltd.	30 th October 2007
35.	S P Apparels Ltd.	25 th December 2007

Sr No.	Name of the acquirer company	Event Date
36.	Speciality Papers Ltd.	25 th August 2007
37.	Strides Acrolab Ltd.	11 th June 2007
38.	Sundram Fasteners Ltd	2 nd December 2007
39.	Systematix Corporate Services Ltd.	21 st June 2007
40.	Tata Power Company Ltd	23 rd April 2007
41.	Tata Steel Ltd.	15 th January 2007
42.	United Credit Ltd.	28 th April 2007
43.	Videocon Industries Ltd.	6 th November 2007
44.	A C I Infocom Ltd.	19 th August 2008
45.	AIA Engineering Ltd.	22 nd October 2008
46.	Allsec Technologies Ltd.	31 st July 2008
47.	Datamatics Global Services Ltd.*	12 th December 2008
48.	Dr. Reddy's Laboratories Ltd.	23 rd October 2008
49.	Essar Securities Ltd.*	4 th January 2008
50.	Genus Power Infrastructures Ltd.	17 th March 2008
51.	Housing Development & Infrastructure Ltd.*	6 th February 2008
52.	Jayaswal Neco Inds. Ltd.	19 th November 2008
53.	Jay Shree Tea Inds. Ltd.	27 th June 2008
54.	Joonktollee Tea Inds. Ltd.*	30 th September 2008
55.	Mahindra & Mahindra Ltd.	30 th July 2008
56.	Orient Paper Industries Ltd.	29 th July 2008
57.	Panama Petrochem Ltd.	24 th March 2008
58.	Piramal Enterprises Ltd.	15 th April 2008
59.	Quest Software (India) Ltd.*	24 th May 2008
60.	RDB Realities & Infrastructure Ltd.*	3 rd April 2008
61.	SEL Manufacturing Company Ltd.*	7 th January 2008
62.	S R F Ltd.	21 st October 2008
63.	SRM Energy Ltd.	20 th November 2008
64.	Stone India Ltd.	2 nd April 2008
65.	TCS Ltd.	9 th October 2008
66.	Zenith Birla (India) Ltd.	22 nd October 2008

*Data regarding share price is not available for acquirer firm.

The study is conducted to see how quickly the market reacts to information, exploring the idea of an investor's ability to earn an above normal return against the Market. In essence, is it possible to outperform the market? With the new information being introduced, like acquisition announcement, it would be expected that the actual average return, within the event period, and the expected average returns within the event period would differ. If a significant difference is observed, then the hypothesis

that ‘the information announcement did increase or decrease the stock price’ should be supported.

★ HYPOTHESES

In order to test the Semi-Strong form of efficient market hypothesis, (Semi-strong form efficiency tests are concerned with whether security prices reflect all publicly available information) in relation to the announcement of acquisitions by the company, the following hypotheses H_{13} to H_{15} are formulated:

H₀₁₃: The Abnormal Return (AR) from the share price of the sample acquirer firm announcing an acquisition is not significantly affected by this type of information on the announcement date and surrounding the announcement date.

H₀₁₄: The Average Abnormal Return (AAR) from the share price of the sample acquirer firms announcing an acquisition is not significantly affected by this type of information on the announcement date and surrounding the announcement date.

H₀₁₅: The Cumulative Average Abnormal Return (CAAR) from the share price of the sample acquirer firms announcing an acquisition is not significantly affected by this type of information for a given event window, as defined in the present research.

6.2 EMPIRICAL RESULTS OF THE STUDY OF THE EFFECT OF ACQUISITION ANNOUNCEMENT ON SHARE PRICE OF THE INDIVIDUAL SAMPLE COMPANIES

★ CALCULATION OF ESTIMATED RETURNS

The returns of a stock that are expected to be observed if no event occurs are called expected or normal returns². Research on the effect of acquisition on shareholders’ value therefore needs an estimate of expected or normal returns for shares over some period of interest³. Normal returns are estimated over a time period other than the time period of the event date, which is generally before the occurrence of event. This time period is called the estimation window¹. In present study, the estimation window

is selected of 180 days i.e. -210 to -30 days. For considering number of days for both 'estimation window' and 'event window', the working days of Bombay Stock Exchange are considered. The study uses an Ordinary Least Squares (OLS) method for estimating the expected returns which is also known as normal returns or estimated returns $E[r]$. The value of OLS estimators of the parameters in the market model α and β for selected companies are as follows:

Table 6.2 Results of OLS for Alpha and Beta values of Sample companies

Sr No.	Name of the Companies	Alpha	Beta
1.	ABG Shipyard Ltd.	0.00306	-0.00448
2.	Aegis Logistics Ltd.	-0.00048	0.60243
3.	Apollo Tyres Ltd.	0.00092	-0.14386
4.	Autoline Industries Ltd.	0.00085	0.29607
5.	Bharat Heavy Electricals Ltd.	-0.00236	0.04585
6.	Bodal Chemicals Ltd.	0.00206	0.55280
7.	Bombay Burma Trading Corp. Ltd.	0.00050	0.99447
8.	Carborundum Universal Ltd.	0.00032	0.16443
9.	Century Plyboards India Ltd.	0.00334	0.60254
10.	Cranes Softwares International Ltd.	0.00163	0.17730
11.	Epic Energy Ltd.	0.01278	0.19378
12.	Exide Industries Ltd.	0.00170	0.65015
13.	GMR Infrastructures Ltd.	-0.00093	0.12725
14.	Godrej Properties Ltd.	0.00355	1.17697
15.	Heritage Foods India Ltd.	0.00394	0.49691
16.	Indoco Remedies Ltd	-0.00421	0.33378
17.	Jet Airways (India) Ltd.	0.00221	-0.07194
18.	Kirloskar Brothers Ltd.	0.00114	0.13790
19.	Kovai Medical Center & Hospital Ltd.	0.00140	-0.18177
20.	Lupin Ltd.	-0.00007	-0.05914
21.	Modern India Ltd.	0.00357	0.50933
22.	Nilkamal Ltd.	-0.00042	0.59702
23.	Pidilite Industries Limited	0.00335	0.06472
24.	Satra Properties India Ltd.	0.00574	-0.06659
25.	S Kumars Nationwide Ltd.	0.00573	0.00426
26.	Sona Koyo Steering Systems Ltd.	-0.00218	0.76785
27.	S P Apparels Ltd.	-0.00019	1.26972
28.	Speciality Papers Ltd.	0.00112	-0.42319
29.	Strides Acrolab Ltd.	0.00127	-0.00867
30.	Sundram Fasteners Ltd	0.00110	-0.18227

Sr No.	Name of the Companies	Alpha	Beta
31.	Systematix Corporate Services Ltd.	0.00156	0.45686
32.	Tata Power Company Ltd	0.00084	-0.08366
33.	Tata Steel Ltd.	-0.00200	1.49885
34.	United Credit Ltd.	0.00305	0.28242
35.	Videocon Industries Ltd.	-0.00179	0.45889
36.	A C I Infocom Ltd.	0.00262	0.11142
37.	AIA Engineering Ltd.	-0.00515	0.71753
38.	Allsec Technologies Ltd.	-0.00494	0.82917
39.	Dr. Reddy's Laboratories Ltd.	-0.00109	-0.02487
40.	Genus Power Infrastructures Ltd.	0.00365	1.17093
41.	Jayaswal Neco Inds. Ltd.	-0.00405	0.79058
42.	Jay Shree Tea Inds. Ltd.	-0.00074	0.68347
43.	Mahindra & Mahindra Ltd.	-0.00060	0.76376
44.	Orient Paper Industries Ltd.	-0.00697	0.53604
45.	Panama Petrochem Ltd.	-0.00502	-0.22956
46.	Piramal Enterprises Ltd.	-0.00014	0.56688
47.	S R F Ltd.	-0.00015	0.97627
48.	SRM Energy Ltd.	0.00118	1.00016
49.	Stone India Ltd.	-0.00272	0.71118
50.	TCS Ltd.	-0.00264	0.15478
51.	Zenith Birla (India) Ltd.	-0.00490	0.36443

After calculating α and β following formula of market model is used to calculate normal returns:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$$

Where,

R_{it} is the normal return of security i , for time period t

R_{mt} is the return of market portfolio. In present study BSE Sensex is used as market portfolio

ε_{it} is error term and has an expected value of zero

★ CALCULATION OF ACTUAL RETURN, ABNORMAL RETURN AND CUMULATIVE ABNORMAL RETURN

At the next step the actual Returns during the event period are considered. The actual returns are returns which the security has earned over the event window. From share price of the sample acquirer company on Bombay stock exchange, actual returns are

derived over the event window. The event period for the study is -10 to +10 days. The difference between Estimated Returns $E[r]$ and Actual Returns is known as Abnormal Returns (AR). On the basis of Abnormal Returns, Cumulative Abnormal Returns (CARs) are calculated. A cumulative return is the aggregate amount an acquirer company's share price has gained or lost over the event window. The cumulative return is calculated by adding the particular day's AR to previous day's AR.

To examine whether the acquisition announcement has affected the abnormal return of the share price of acquirer firm or not, t test is applied on the Abnormal Returns. This calculation is carried out for each individual sample company and at last aggregated values for all sample companies in aggregate manner *i.e.* Average Abnormal Returns (AAR). To analyse the effect of acquisition announcement (the event) on the sample companies over defined time frame, CAAR for seven event windows, (-1,+1), (-2,+2), (-3,+3), (-5,+5), (-10,+10), (-1,+10), (-2,+5) are calculated. These event windows are part of the main event window, *i.e.* (-10, +10). To examine whether the acquisition announcement has affected the average abnormal return of entire sample or not, t test is applied on the Average Abnormal Returns (AAR) and Cumulative Average Abnormal Returns (CAAR) for selected event windows. A combined graph of Normal Return, Abnormal Return and Cumulative Abnormal Return is prepared for each sample company and also for aggregate values. For aggregate results line graph of AAR and CAAR is also prepared to study their movements in event window.

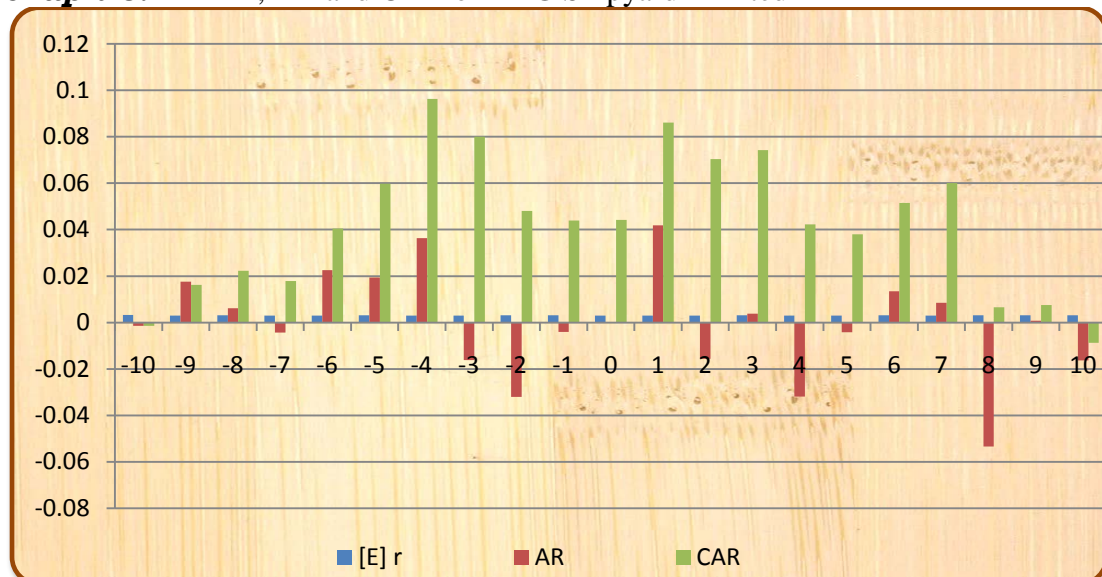
★ CALCULATION OF $E[r]$, AR, CAR AND t TEST FOR INDIVIDUAL SAMPLE COMPANIES

- 1. ABG SHIPYARD LIMITED:** In case of ABG Shipyard Limited the abnormal return on share prices before acquisition announcement is statistically insignificant on all the days. It shows statistically significant changes on 1st and 8th day after acquisition announcement. The CAR is positive on all the event days except on the first and last day of the event window. The highest value of CAR is 9.63% on the 4th day prior to event window and the lowest value is 0.14% on the 10th day prior to event window.

Table 6.3 [E]r, AR and CAR values of ABG Shipyard Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0032	-0.0014	-0.0014	-0.0510
-9	0.0030	0.0176	0.0162	0.6046
-8	0.0031	0.0061	0.0223	0.2089
-7	0.0030	-0.0043	0.0179	-0.1497
-6	0.0030	0.0225	0.0404	0.7708
-5	0.0031	0.0194	0.0598	0.6629
-4	0.0030	0.0364	0.0963	1.2452
-3	0.0030	-0.0162	0.0800	-0.5563
-2	0.0031	-0.0320	0.0480	-1.0944
-1	0.0031	-0.0040	0.0439	-0.1391
0	0.0030	0.0002	0.0442	0.0087
1	0.0030	0.0419	0.0861	1.4328*
2	0.0030	-0.0156	0.0704	-0.5341
3	0.0031	0.0038	0.0743	0.1307
4	0.0030	-0.0319	0.0423	-1.0930
5	0.0030	-0.0042	0.0380	-0.1451
6	0.0031	0.0134	0.0515	0.4605
7	0.0030	0.0085	0.0600	0.2911
8	0.0031	-0.0534	0.0066	-1.8256**
9	0.0031	0.0008	0.0075	0.0291
10	0.0031	-0.0163	-0.0087	-0.5573

Note: * Significant at 10% level, ** Significant at 5% level

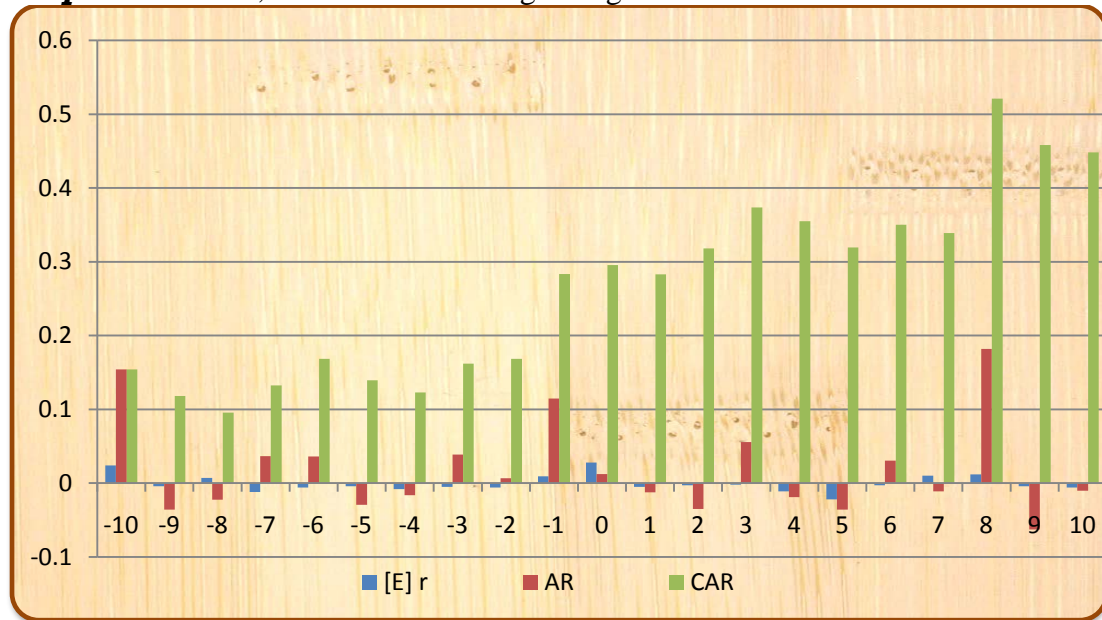
Graph 6.1 ER, AR and CAR of ABG Shipyard Limited

2. AIGES LOGISTICS LIMITED: The share prices of Aiges Logistics Limited depict clear impact of acquisition. The abnormal returns are statistically significant on 1st 3rd 6th 7th 9th and 10th day before the event day. It is positive on all these days except 9th day, The abnormal returns are statistically significant and negative on 2nd 5th and 9th and positive on 3rd and 8th day post event . The CAR values are positive in entire event window. The highest value of CAR (52.09%) is observed on 8th day after the event.

Table 6.4 [E]r, AR and CAR values of Aiges Logistics Limited

Days	[E] r	AR	CAR	AR T-test
-10	0.0242	0.1542	0.1542	2.1184 ^{**}
-9	-0.0040	-0.0359	0.1182	-1.4270 [*]
-8	0.0072	-0.0224	0.0958	-0.8905
-7	-0.0120	0.0365	0.1324	1.4512 [*]
-6	-0.0060	0.0360	0.1684	1.4277 [*]
-5	-0.0040	-0.0291	0.1392	-1.1564
-4	-0.0080	-0.0163	0.1229	-0.6469
-3	-0.0050	0.0389	0.1618	1.5431 [*]
-2	-0.0060	0.0067	0.1686	0.2669
-1	0.0091	0.1147	0.2833	4.5489 ^{***}
0	0.0278	0.0123	0.2956	0.4889
1	-0.0050	-0.0124	0.2831	-0.4942
2	-0.0030	-0.0350	0.3181	-1.3880 [*]
3	-0.0020	0.0555	0.3736	2.2012 ^{**}
4	-0.0110	-0.0187	0.3549	-0.7415
5	-0.0220	-0.0356	0.3193	-1.4144 [*]
6	-0.0030	0.0307	0.3500	1.2187
7	0.0101	-0.0113	0.3387	-0.4481
8	0.0121	0.1821	0.5209	7.2251 ^{***}
9	-0.0040	-0.0627	0.4581	-2.4890 ^{**}
10	-0.006	-0.0101	0.4480	-0.4008

Note: * Significant at 10% level, ** Significant at 5% level *** Significant at 1% Level

Graph 6.2 ER, AR and CAR of Aiges Logistics Limited

3. APOLLO TYRES LIMITED: The abnormal return on share prices of Apollo Tyres Limited are statistically significant on 1st and 4th day before the acquisition event and 2nd 4th 5th 6th 8th and 10th day after announcement of acquisition event. On the event date also it shows significant negative abnormal return on share prices of the company, which indicates negative effect of acquisition announcement on the share price. The CAR values are negative on majority days of the event window, specially in post event period. The highest negative value (97.01%) of CAR is observed on 4th day after the event day. The next section discusses the summary of results and testing of hypotheses of the study of effect of acquisition announcement on share price of the individual sample companies.

4. AUTOLINE INDUSTRIES LIMITED: The abnormal returns of Autoline Industries Limited are statistically significant on 2nd 4th 5th and 10th day before the acquisition event and on 4th day after the acquisition event. The announcement effect before acquisition *i.e.* on 2nd 4th 5th and 10th day, show statistically significant positive impact on the security price and after the acquisition event *i.e.* on 4th day, it show statistically significant negative effect on security price. The CAR is positive for entire event window, highest CAR is observed on 1day after to event which is 13.16% and the lowest CAR is 6.29% on the first day of event window. The CAR values are high around the event day, which is around 12% to 13%.

Table 6.5 [E]r, AR and CAR values of Apollo Tyres Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0037	0.0055	0.0055	0.2786
-9	-0.0005	0.0233	0.0288	1.1661
-8	0.0031	-0.0251	0.0037	-1.2582
-7	0.0006	-0.0065	-0.0028	-0.3293
-6	-0.0026	0.0013	-0.0014	0.0684
-5	0.0028	-0.0014	-0.0028	-0.0702
-4	0.0020	0.0360	0.0331	1.8016**
-3	-0.0005	0.0220	0.0551	1.1036
-2	0.0010	-0.0175	0.0376	-0.8761
-1	0.0070	-0.0611	-0.0235	-3.0606***
0	0.0030	-0.8971	-0.9206	-4.8992***
1	-0.0019	0.0096	-0.9109	0.4818
2	0.0052	-0.0305	-0.9415	-1.5285*
3	-0.0017	-0.0008	-0.9423	-0.0419
4	0.0017	-0.0277	-0.9701	-1.3886*
5	-0.0017	0.0404	-0.9297	2.0219**
6	-0.0032	0.0314	-0.8982	1.5759*
7	0.0001	-0.0176	-0.9158	-0.8833
8	0.0002	-0.0307	-0.9465	-1.5364*
9	-0.0003	0.0212	-0.9252	1.0654
10	-0.0009	0.0433	-0.8819	2.1680**

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

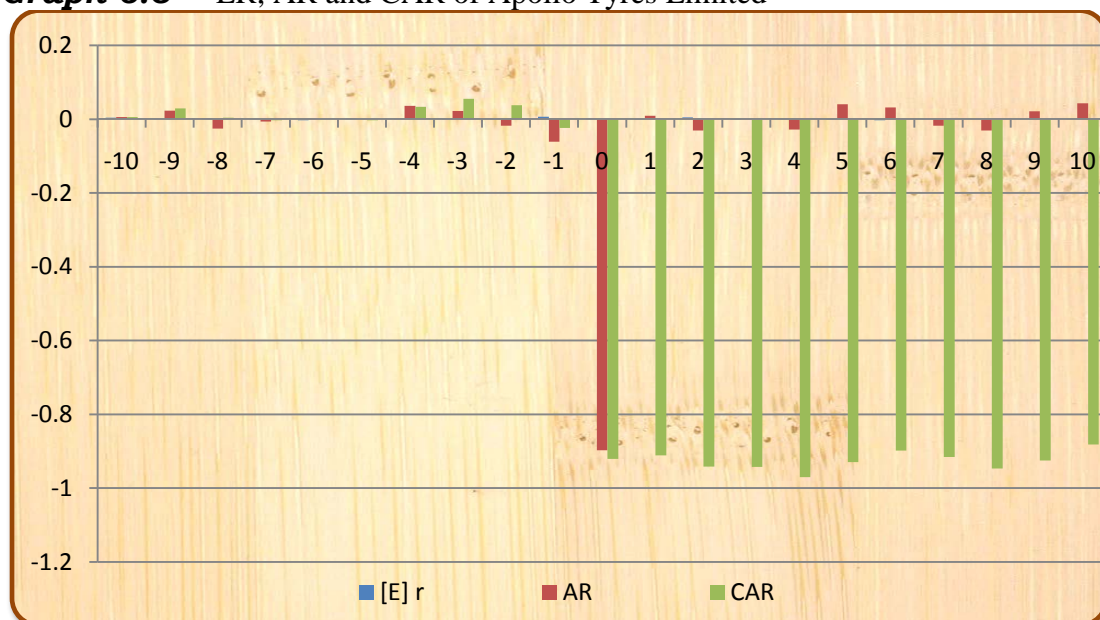
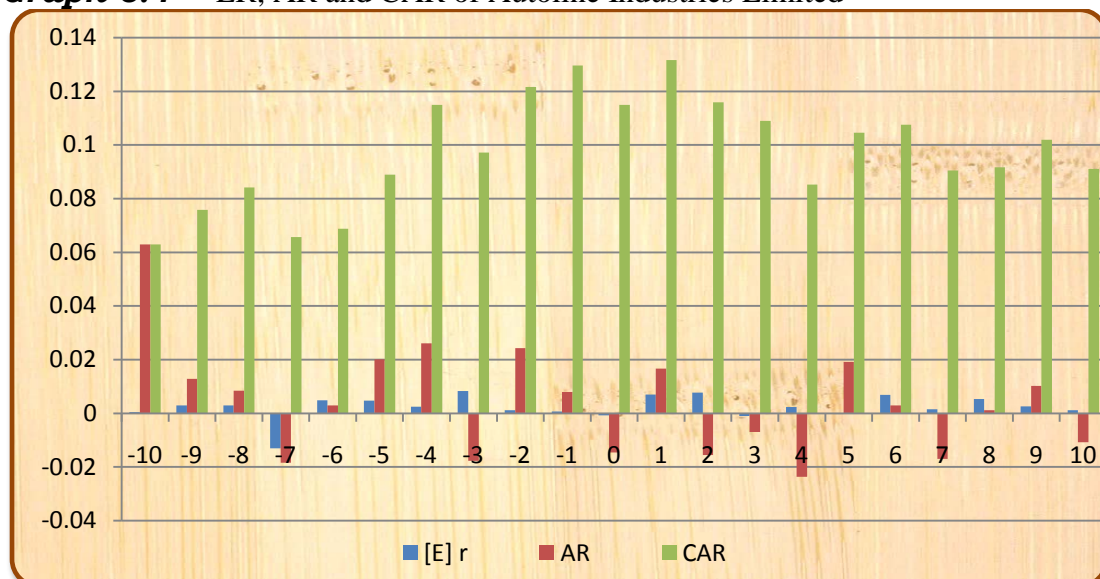
Graph 6.3 ER, AR and CAR of Apollo Tyres Limited

Table 6.6 [E]r, AR and CAR values of Autoline Industries Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0004	0.0629	0.0629	4.2125***
-9	0.0030	0.0128	0.0758	0.8620
-8	0.0030	0.0084	0.0842	0.5631
-7	-0.0130	-0.0184	0.0657	-1.2359
-6	0.0049	0.0030	0.0688	0.2069
-5	0.0047	0.0201	0.0889	1.3472*
-4	0.0025	0.0261	0.1150	1.7474**
-3	0.0083	-0.0177	0.0972	-1.1910
-2	0.0011	0.0243	0.1216	1.6301*
-1	0.0007	0.0079	0.1296	0.5345
0	-0.0007	-0.0146	0.1149	-0.9823
1	0.0070	0.0167	0.1316	1.1199
2	0.0077	-0.0156	0.1159	-1.0497
3	-0.0010	-0.0069	0.1090	-0.4645
4	0.0023	-0.0236	0.0853	-1.5834*
5	-0.0003	0.0192	0.1046	1.2893
6	0.0069	0.0029	0.1076	0.1977
7	0.0015	-0.0170	0.0905	-1.1403
8	0.0053	0.0011	0.0917	0.0770
9	0.0026	0.0102	0.1019	0.6850
10	0.0011	-0.0108	0.0911	-0.7228

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

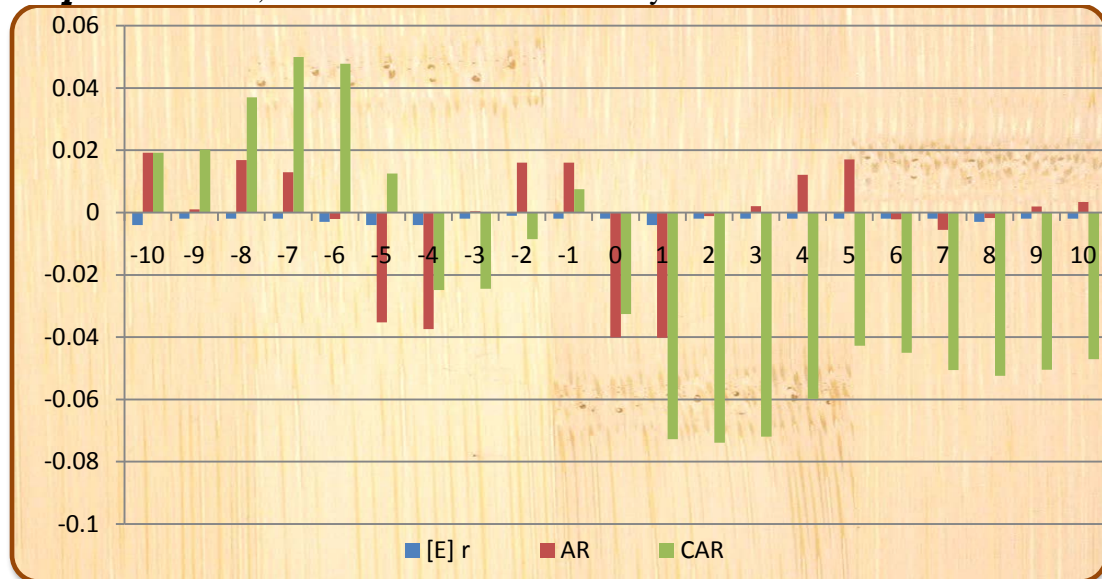
Graph 6.4 ER, AR and CAR of Autoline Industries Limited

5. BHARAT HEAVY ELECTRICALS LIMITED: The BHEL is showing statistically significant negative change in abnormal return on the 4th day before the event, on the event day and one day after the event. So here it could be added that the acquisition announcement has negatively affected the share price of the company on and around the event day. The CARs are negative from 4th day prior to event day to 10th day after the event.

Table 6.7 [E]r, AR and CAR values of Bharat Heavy Electricals Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0080	0.0192	0.0192	1.0013
-9	-0.0020	0.0010	0.0202	0.0406
-8	-0.0020	0.0168	0.0370	0.6317
-7	-0.0020	0.0129	0.0499	0.4846
-6	-0.0030	-0.0021	0.0478	-0.0785
-5	-0.0040	-0.0353	0.0125	-1.3223
-4	-0.0040	-0.0374	-0.0249	-1.4024 [*]
-3	-0.0020	0.0004	-0.0245	0.0150
-2	-0.0010	0.0160	-0.0085	0.6010
-1	-0.0020	0.0160	0.0075	0.6006
0	-0.0020	-0.0401	-0.0326	-1.5015 [*]
1	-0.0040	-0.0402	-0.0728	-1.5076 [*]
2	-0.0020	-0.0011	-0.0739	-0.0423
3	-0.0020	0.0020	-0.0719	0.0759
4	-0.0020	0.0121	-0.0598	0.4560
5	-0.0020	0.0170	-0.0428	0.6366
6	-0.0020	-0.0022	-0.0450	-0.0837
7	-0.0020	-0.0056	-0.0506	-0.2110
8	-0.0030	-0.0018	-0.0524	-0.0674
9	-0.0020	0.0019	-0.0505	0.0746
10	-0.0020	0.0034	-0.0471	0.1289

Note: * Significant at 10% level

Graph 6.5 ER, AR and CAR of Bharat Heavy Electricals Limited

6. BODAL CHEMICALS LIMITED: For Bodal Chemicals Limited, the abnormal returns on share prices are statistically significant and positive only on 4th day before the acquisition announcement. This conveys that acquisition announcement has not affected the share price in general. The CAR values are positive on all the day of the event window. The highest value of CAR is 15.36% and the lowest value of CAR is -0.76%.

7. BOMBAY BURMAH TRADING CORPORATION LIMITED: The abnormal returns on share price in case of this company show statistically significant change on 10th day prior to announcement date, on the event date and on 7th day after the event. The abnormal returns are negative before and on acquisition date and positive after acquisition for some of the days. This indicates that share holders have mixed response towards acquisition. The CAR is negative from 10th day prior to event till the 6th day after the event. On the 7th day after the event AR (9.31%) is positive, the effect of this is also observed in positive CAR on and after that date.

Table 6.8 [E]r, AR and CAR values of Bodal Chemicals Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0013	0.0237	0.0237	0.5328
-9	-0.0020	-0.0208	0.0029	-0.4861
-8	0.0027	-0.0080	-0.0051	-0.1866
-7	0.0016	-0.0025	-0.0076	-0.0590
-6	0.0031	0.0201	0.0125	0.4682
-5	0.0089	0.0294	0.0419	0.6860
-4	0.0006	0.0992	0.1411	2.3097**
-3	0.0099	-0.0442	0.0969	-1.0298
-2	0.0088	-0.0206	0.0763	-0.4807
-1	0.0022	-0.0181	0.0582	-0.4233
0	0.0065	0.0235	0.0817	0.5481
1	0.0034	-0.0041	0.0776	-0.0976
2	-0.0010	-0.0049	0.0727	-0.1143
3	-0.0040	-0.0068	0.0659	-0.1582
4	0.0067	0.0430	0.1089	1.0015
5	0.0043	0.0124	0.1213	0.2903
6	0.0063	-0.0311	0.0902	-0.7240
7	-0.0020	-0.0222	0.068	-0.5184
8	0.0072	-0.0119	0.0561	-0.2770
9	0.0031	0.0469	0.1030	1.0927
10	-0.0008	0.0506	0.1536	1.1796

Note: ** Significant at 5% level

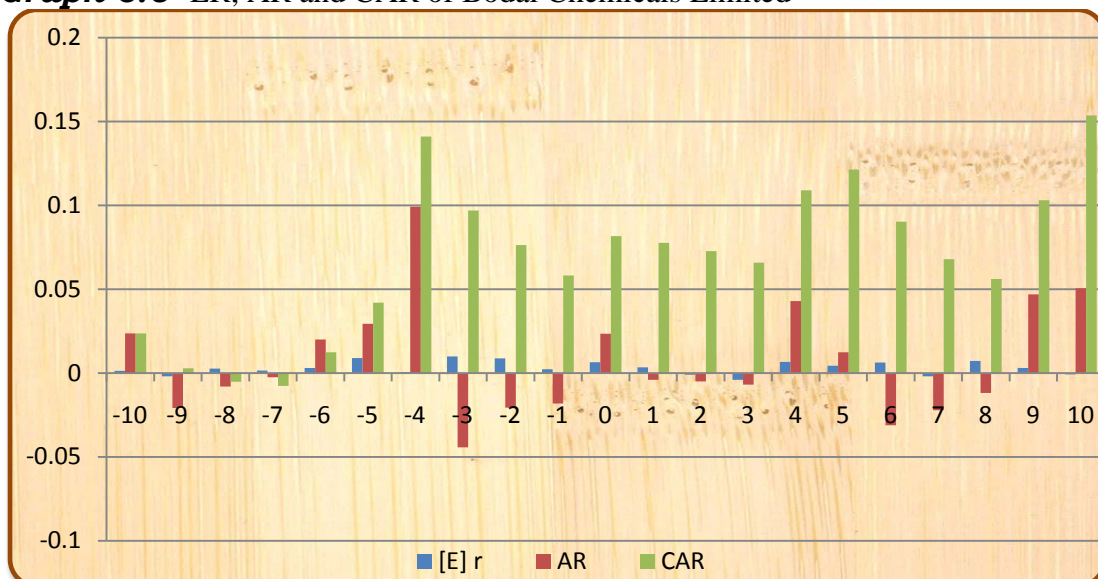
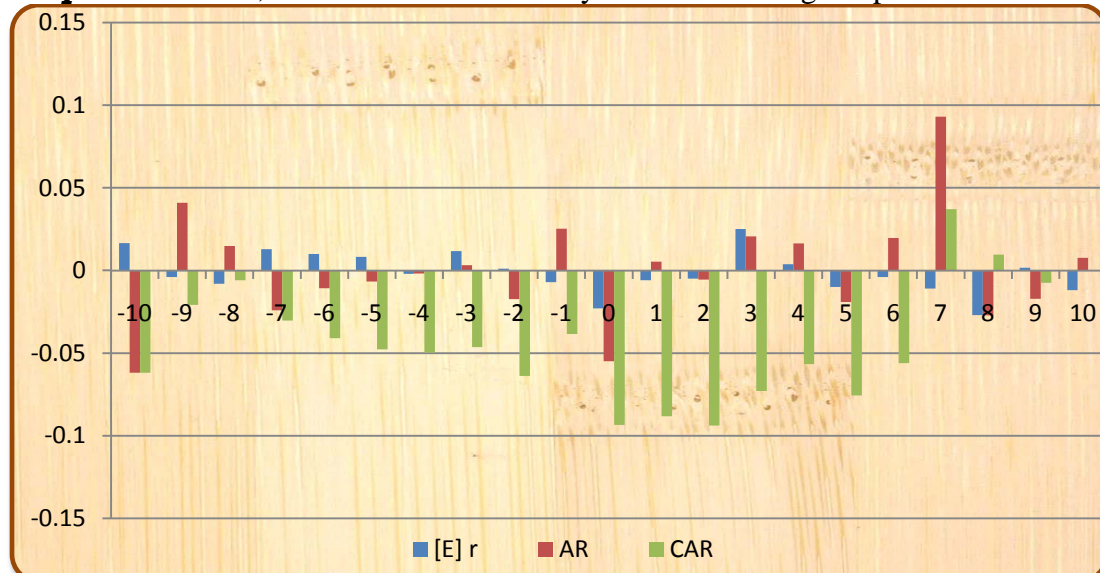
Graph 6.6 ER, AR and CAR of Bodal Chemicals Limited

Table 6.9 [E]r, AR and CAR values of Bombay Burma Trading Corporation Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0165	-0.0619	-0.0619	-1.4458*
-9	-0.0040	0.0410	-0.0209	0.9576
-8	-0.0080	0.0148	-0.0060	0.3465
-7	0.0129	-0.0242	-0.0303	-0.5654
-6	0.0100	-0.0107	-0.0410	-0.2512
-5	0.0082	-0.0067	-0.0478	-0.1571
-4	-0.0020	-0.0018	-0.0496	-0.0425
-3	0.0118	0.0032	-0.0463	0.0760
-2	0.0011	-0.0174	-0.0638	-0.4072
-1	-0.0070	0.0253	-0.0385	0.5904
0	-0.0230	-0.0550	-0.0935	-1.9841**
1	-0.0060	0.0053	-0.0882	0.1250
2	-0.0050	-0.0055	-0.0938	-0.1301
3	0.0250	0.0207	-0.0730	0.4843
4	0.0038	0.0163	-0.0567	0.3807
5	-0.0100	-0.0190	-0.0757	-0.4444
6	-0.0040	0.0196	-0.0561	0.4572
7	-0.0110	0.0931	0.0370	2.1730**
8	-0.0270	-0.0273	0.0096	-0.6375
9	0.0017	-0.0171	-0.0075	-0.4008
10	-0.0120	0.0077	0.0002	0.1815

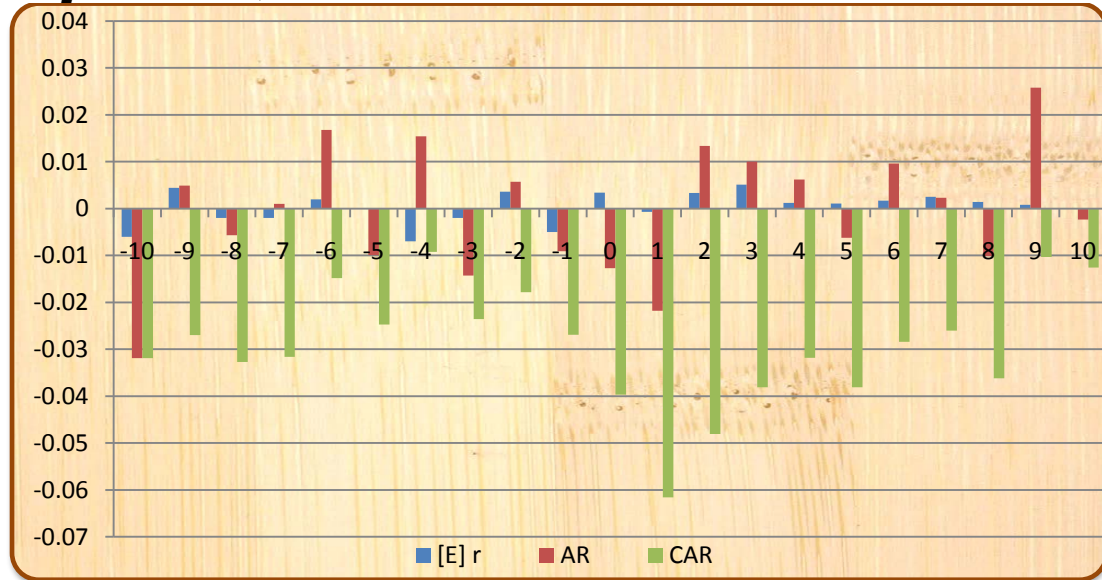
Note: * Significant at 10% level, ** Significant at 5% level

Graph 6.7 ER, AR and CAR of Bombay Burmah Trading Corporation Limited

- 8. CARBORUNDUM UNIVERSAL LIMITED:** In case of Carborundum Universal Limited abnormal return on share price is statistically insignificant on all the days during the event window. So it could be mentioned here that acquisition announcement has not affected the share price of the company surrounding the event days. The CARs are negative for entire event window.
- 9. CENTURY PLY BOARDS INDIA LIMITED:** Century Ply Boards India Limited shows statistically significant negative abnormal returns on share price on first and last day of the event window *i.e.* on 10th day prior announcement and on 10th day after announcement day. This reflects that the acquisition announcement has affected the share prices negatively. The CAR values are negative for entire event window, showing negative effect of acquisition on share price of the company. The lowest value of CAR is -18.17% on the 10th day after the event.

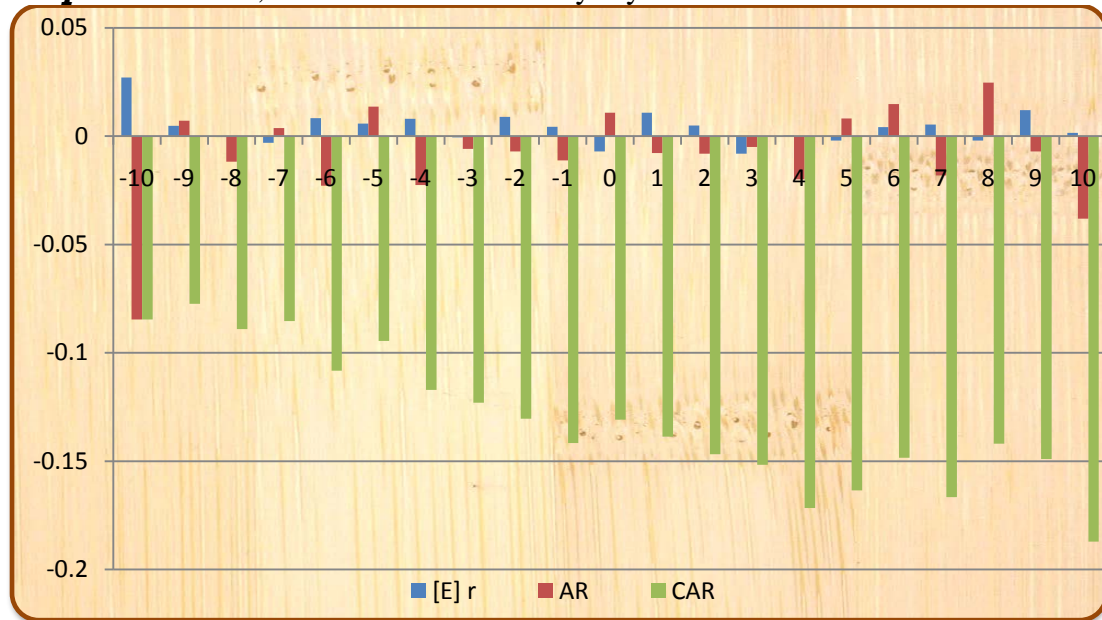
Table 6.10 [E]_r, AR and CAR values of Carborundum Universal Limited

Days	[E] _r	AR	CAR	t-test on AR
-10	-0.0060	-0.0319	-0.0319	-1.2189
-9	0.0044	0.0049	-0.0270	0.1887
-8	-0.0020	-0.0057	-0.0327	-0.2173
-7	-0.0020	0.0010	-0.0316	0.0408
-6	0.0020	0.0168	-0.0148	0.6413
-5	0.0001	-0.0099	-0.0247	-0.3780
-4	-0.0070	0.0154	-0.0092	0.5899
-3	-0.0020	-0.0143	-0.0236	-0.5465
-2	0.0036	0.0057	-0.0178	0.2189
-1	-0.0050	-0.0091	-0.0269	-0.3478
0	0.0034	-0.0127	-0.0397	-0.4877
1	-0.0007	-0.0218	-0.0616	-0.8323
2	0.0033	0.0134	-0.0481	0.5136
3	0.0051	0.0100	-0.0381	0.3818
4	0.0012	0.0062	-0.0318	0.2388
5	0.0011	-0.0062	-0.0381	-0.2377
6	0.0017	0.0096	-0.0284	0.3690
7	0.0025	0.0023	-0.0260	0.0891
8	0.0014	-0.0101	-0.0362	-0.3860
9	0.0008	0.0258	-0.0103	0.9848
10	0.0001	-0.0023	-0.0126	-0.0883

Graph 6.8 ER, AR and CAR of Carborundum Universal Limited**Table 6.11** [E]r, AR and CAR values of Century Ply Boards India Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0271	-0.0846	-0.0846	-3.2005***
-9	0.0048	0.0071	-0.0774	0.2703
-8	-0.0004	-0.0117	-0.0891	-0.4425
-7	-0.0030	0.0037	-0.0854	0.1412
-6	0.0084	-0.0228	-0.1082	-0.8637
-5	0.0058	0.0137	-0.0945	0.5202
-4	0.0080	-0.0226	-0.1171	-0.8551
-3	-0.0006	-0.0059	-0.1230	-0.2241
-2	0.0089	-0.007	-0.1304	-0.2800
-1	0.0044	-0.0112	-0.1417	-0.4249
0	-0.0070	0.0108	-0.1308	0.4087
1	0.0108	-0.0078	-0.1387	-0.2962
2	0.0050	-0.0081	-0.1468	-0.3072
3	-0.0080	-0.0049	-0.1517	-0.1866
4	0.0004	-0.0199	-0.1717	-0.7556
5	-0.0020	0.0082	-0.1635	0.3114
6	0.0042	0.0149	-0.1485	0.5671
7	0.0054	-0.0181	-0.1666	-0.6859
8	-0.0020	0.0247	-0.1419	0.9358
9	0.0120	-0.0071	-0.1490	-0.2703
10	0.0016	-0.0380	-0.1871	-1.4380*

Note: * Significant at 10% level, ** Significant at 5% level *** Significant at 1% Level

Graph 6.9 ER, AR and CAR of Century Ply Boards India Limited

10. CRANES SOFTWARE INTERNATIONAL LIMITED: The abnormal return on share price is statistically significant and positive on 1st 8th and 9th day prior to acquisition announcement. The returns are statistically significant on 6th and 8th day after announcement day. It can be noted here that the abnormal returns are positive surrounding the event day *i.e.* on 1st 8th and 9th day prior the event and on 6th day after the event. Except 10th day prior to event window, the CAR values are positive for entire event window. Though there are many negative ARs on various days of the event window, the cumulative effect is positive.

11. EPIC ENERGY LIMITED: For Epic Energy Limited the, abnormal return is statistically significant and negative on the event day on 4th and 9th day prior to event day. So it is observed that acquisition announcement has negative effect on share price. The abnormal returns are statistically insignificant on all the days after acquisition announcement. The CARs are positive for entire event window, except on 9th day prior to event day. The CAR is negative on 9th day because of statistically significant negative AR (-4.55%) on the 9th day.

Table 6.12 [E]r, AR and CAR values of Cranes Software International Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0045	-0.1494	-0.0149	-0.7675
-9	-0.0020	0.0594	0.0444	3.0898***
-8	0.0008	0.0958	0.1402	4.9845***
-7	0.0001	-0.0159	0.1243	-0.8273
-6	0.0019	0.0019	0.1262	0.1015
-5	0.0022	-0.0170	0.1092	-0.8885
-4	0.0002	-0.0197	0.0895	-1.0270
-3	0.0042	0.0171	0.1066	0.8914
-2	0.0011	-0.0161	0.0905	-0.8415
-1	0.0006	0.0425	0.1330	2.2131**
0	0.0043	0.0028	0.1358	0.1460
1	0.0031	-0.0027	0.1331	-0.1402
2	0.0027	-0.0094	0.1237	-0.4897
3	0.0012	-0.0200	0.1037	-1.0413
4	0.0019	-0.0103	0.0934	-0.5356
5	0.0018	-0.0106	0.0828	-0.5550
6	0.0008	0.0425	0.1253	2.2093**
7	0.0025	-0.0006	0.1247	-0.0344
8	0.0034	-0.0321	0.0926	-1.6701*
9	0.0018	0.0185	0.1111	0.9647
10	0.0033	-0.0251	0.0860	-1.3086

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

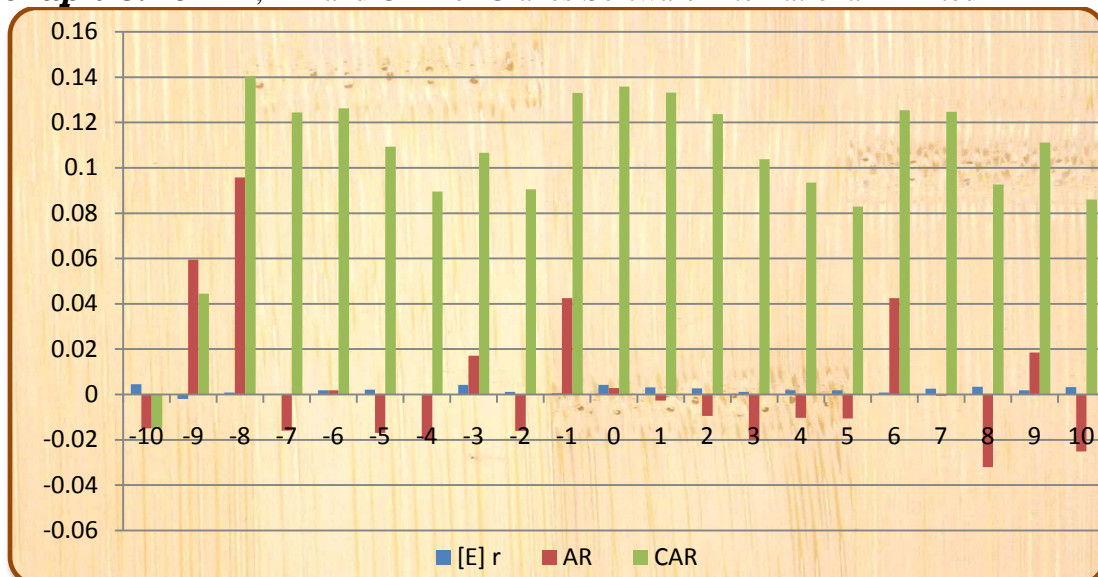
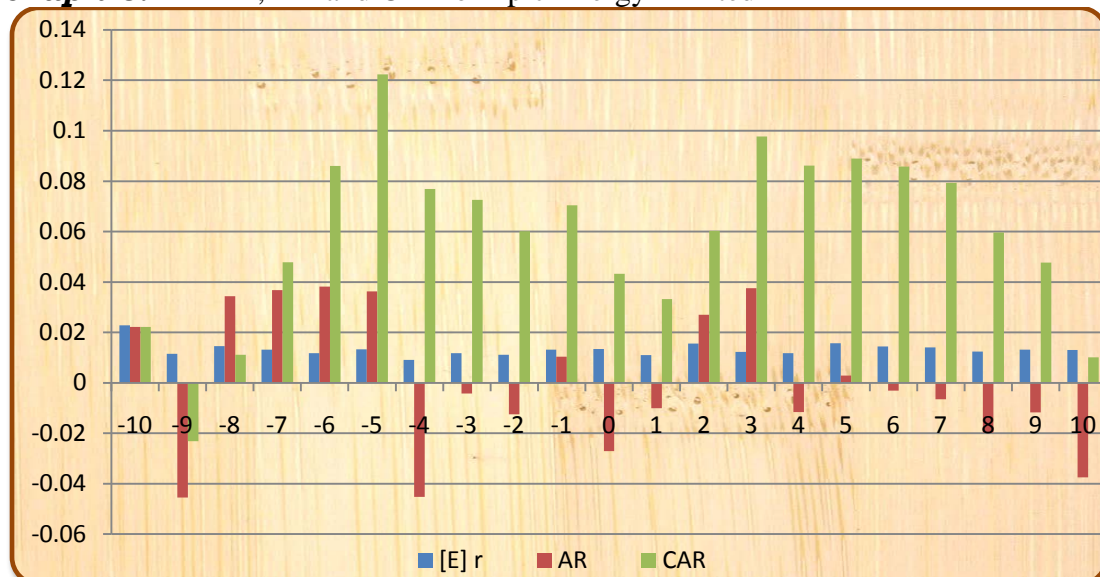
Graph 6.10 ER, AR and CAR of Cranes Software International Limited

Table 6.13 [E]r, AR and CAR values of Epic Energy Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0228	0.0222	0.0222	0.6895
-9	0.0115	-0.0455	-0.0232	-1.4117*
-8	0.0146	0.0344	0.0111	1.0676
-7	0.0131	0.0367	0.0478	1.1388
-6	0.0118	0.0382	0.0860	1.1847
-5	0.0133	0.0362	0.1223	1.1228
-4	0.0091	-0.0453	0.0769	-1.4063*
-3	0.0118	-0.0043	0.0726	-0.1334
-2	0.0111	-0.0125	0.0601	-0.3880
-1	0.0131	0.0103	0.0704	0.3206
0	0.0134	-0.0271	0.0433	-1.8419**
1	0.0110	-0.0101	0.0332	-0.3132
2	0.0156	0.0270	0.0602	0.8386
3	0.0122	0.0375	0.0977	1.1635
4	0.0117	-0.0116	0.0861	-0.3613
5	0.0157	0.0028	0.0890	0.0890
6	0.0144	-0.0031	0.0858	-0.0975
7	0.0140	-0.0065	0.0793	-0.2034
8	0.0124	-0.0197	0.0596	-0.6107
9	0.0131	-0.0118	0.0477	-0.3666
10	0.0130	-0.0375	0.0101	-1.1652

Note: 1. * Significant at 10% level, ** Significant at 5% level

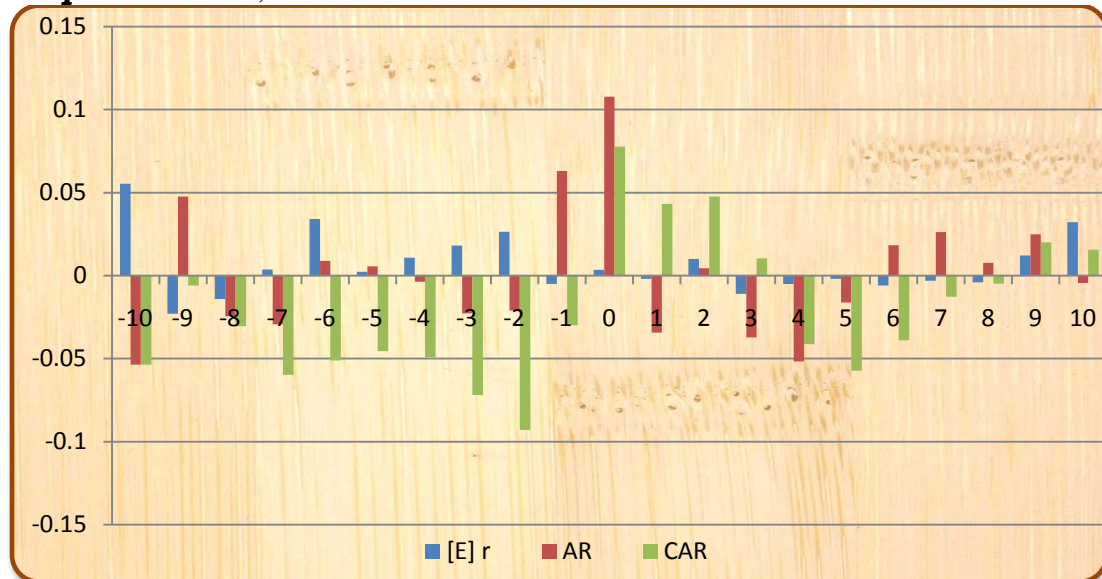
Graph 6.11 ER, AR and CAR of Epic Energy Limited

12. EXIDE INDUSTRIES LIMITED: The abnormal returns for Exide Industries Limited are statistically significant and positive on the event day. It is also significant on 1st 9th and 10th day before acquisition announcement and on 1st 3rd and 4th day after the announcement day. The CAR values are negative till 8th day after the event, for 9th and 10th day the values are positive. The highest value of CAR is 2% on the 8th day after the event and the lowest value is 9.30% on the 2nd day prior to event.

Table 6.14 [E]r, AR and CAR values of Exide Industries Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0553	-0.0536	-0.0536	-2.0910 ^{**}
-9	-0.0230	0.0477	-0.0059	1.8610 ^{**}
-8	-0.0140	-0.0245	-0.0304	-0.9557
-7	0.0037	-0.0294	-0.0598	-1.1469
-6	0.0341	0.0088	-0.0511	0.3425
-5	0.0024	0.0055	-0.0455	0.2144
-4	0.0108	-0.0036	-0.0492	-0.1439
-3	0.0181	-0.0227	-0.0720	-0.8858
-2	0.0265	-0.0210	-0.0930	-0.8192
-1	-0.0050	0.0630	-0.0299	2.4564 ^{**}
0	0.0035	0.1077	0.0777	4.1946 ^{***}
1	-0.0020	-0.0344	0.0432	-1.3409 [*]
2	0.0100	0.0044	0.0477	0.1727
3	-0.0110	-0.0373	0.0104	-1.4526 [*]
4	-0.0050	-0.0516	-0.0412	-2.0122 ^{**}
5	-0.0020	-0.0161	-0.0573	-0.6272
6	-0.0060	0.0183	-0.0389	0.7157
7	-0.0030	0.0262	-0.0127	1.0218
8	-0.0040	0.0078	-0.0048	0.3062
9	0.0121	0.0249	0.0200	0.9709
10	0.0322	-0.0044	0.0156	-0.1716

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level,

Graph 6.12 ER, AR and CAR of Exide Industries Limited

13. GMR INFRASTRUCTURES LIMITED: In case of GMR Infrastructures Limited, abnormal return on share price is statistically significant and positive, only on 6th and 8th day prior to the event day, reflecting expectation of shareholders from the company about acquisition. Overall it reflects that the acquisition announcement has not affected the share price of the company much on and after the event date. The CAR values are positive for entire event window in case of the company. The high AR values are observed on 6th (4.65%) and 2nd (3.49%) day prior to and on 2nd day (-3.77%) after acquisition announcement. This resulted in high CAR values which are observed around the event day *i.e.* on 1st day prior to event day (11.79%), on the event day (12.88%) and on the first day after the event day (14.24%), indicating positive gains in share price surrounding the event date.

14. GODREJ PROPERTIES LIMITED: The abnormal return on share prices for Godrej Properties Limited is statistically significant and negative on 6th day prior to acquisition announcement and significantly positive on 4th and 5th day after the announcement day. This reflects that initially there was negative effect of acquisition on the share price and it is positive after the event day. After 5th day prior to event day, the CAR values are negative for entire event window.

Table 6.15 [E]r, AR and CAR values of GMR Infrastructures Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0046	0.0271	0.0271	0.9496
-9	0.0039	-0.0059	0.0211	-0.2095
-8	0.0056	0.0584	0.0796	2.0458*
-7	0.0054	-0.0166	0.0629	-0.5830
-6	0.0042	0.0465	0.1094	1.6278*
-5	0.0050	-0.0234	0.0860	-0.8189
-4	0.0044	0.0120	0.0981	0.4215
-3	0.0036	-0.0202	0.0779	-0.7066
-2	0.0032	0.0349	0.1128	1.2216
-1	0.0050	0.0050	0.1179	0.1774
0	0.0046	0.0109	0.1288	0.3822
1	0.0049	0.0136	0.1424	0.4766
2	0.0035	-0.0377	0.1047	-1.3197
3	0.0051	-0.0020	0.1027	-0.0717
4	0.0044	-0.0004	0.1022	-0.0153
5	0.0037	-0.0262	0.0760	-0.9172
6	0.0044	0.0169	0.0930	0.5934
7	0.0023	-0.0175	0.0754	-0.6149
8	0.0037	0.0014	0.0769	0.0518
9	0.0034	0.0253	0.1022	0.8858
10	0.0043	0.0016	0.1039	0.0590

Note: * Significant at 10% level

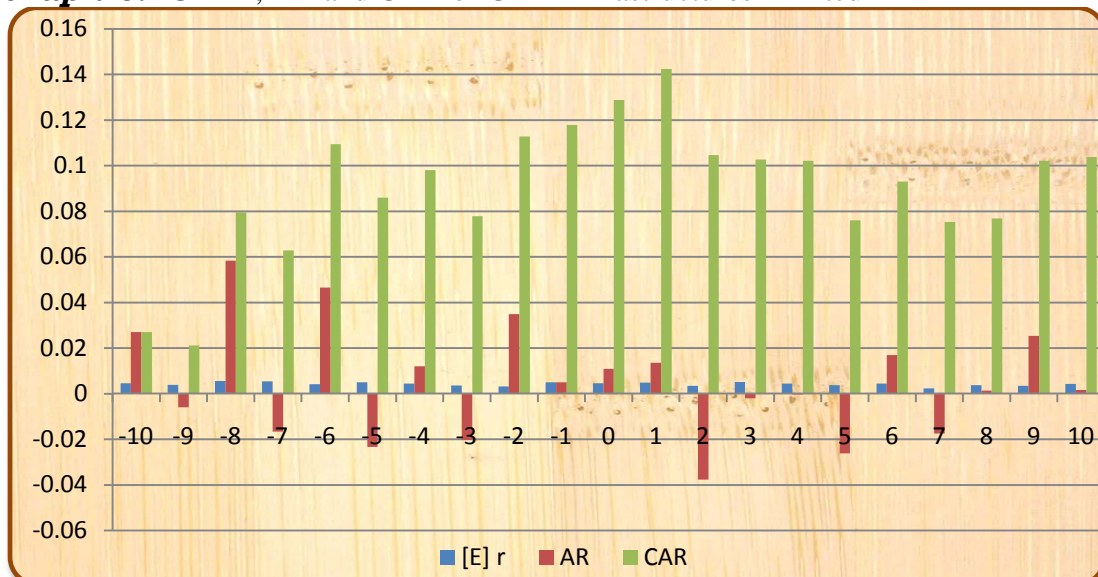
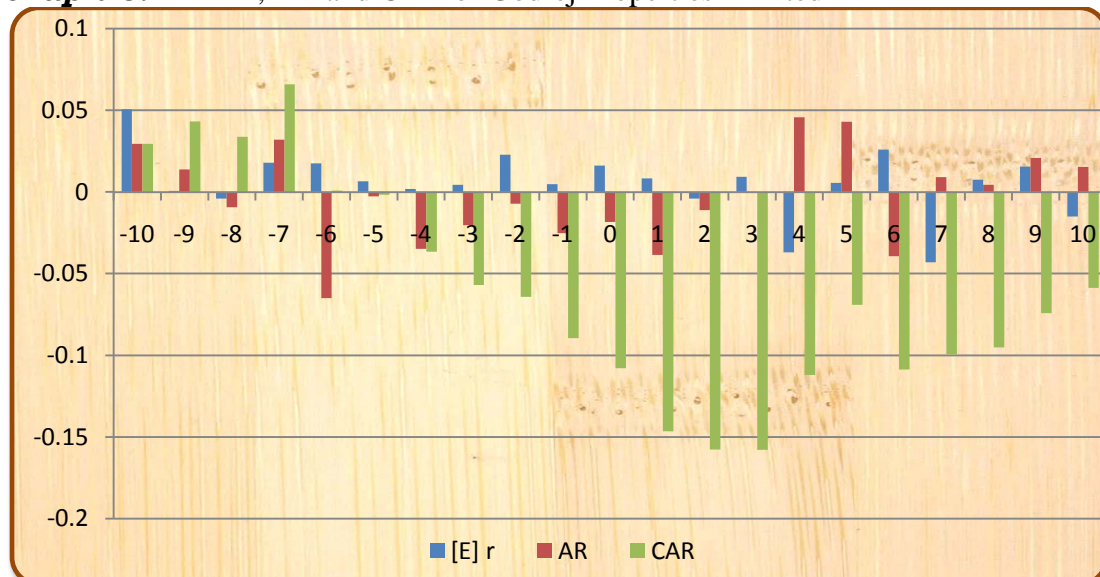
Graph 6.13 ER, AR and CAR of GMR Infrastructures Limited

Table 6.16 [E]r, AR and CAR values of Godrej Properties Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0506	0.0294	0.0294	0.9641
-9	0.0007	0.0137	0.0432	0.4518
-8	-0.0040	-0.0093	0.0338	-0.3074
-7	0.0179	0.0321	0.0659	1.0526
-6	0.0176	-0.0650	0.0009	-2.1302**
-5	0.0065	-0.0027	-0.0017	-0.0885
-4	0.0019	-0.0348	-0.0366	-1.1420
-3	0.0044	-0.0203	-0.0569	-0.6669
-2	0.0227	-0.0072	-0.0642	-0.2373
-1	0.0047	-0.0253	-0.0895	-0.8296
0	0.0161	-0.0184	-0.1079	-0.6028
1	0.0082	-0.0386	-0.1465	-1.2653
2	-0.0040	-0.0111	-0.1577	-0.3664
3	0.0093	-0.0001	-0.1578	-0.0038
4	-0.0370	0.0457	-0.1121	1.4979*
5	0.0056	0.0429	-0.0691	1.4073*
6	0.0259	-0.0394	-0.1086	-1.2927
7	-0.0430	0.0090	-0.0995	0.2970
8	0.0075	0.0044	-0.0951	0.1443
9	0.0155	0.0209	-0.0742	0.6872
10	-0.0150	0.0154	-0.0587	0.5075

Note: * Significant at 10% level, ** Significant at 5% level

Graph 6.14 ER, AR and CAR of Godrej Properties Limited

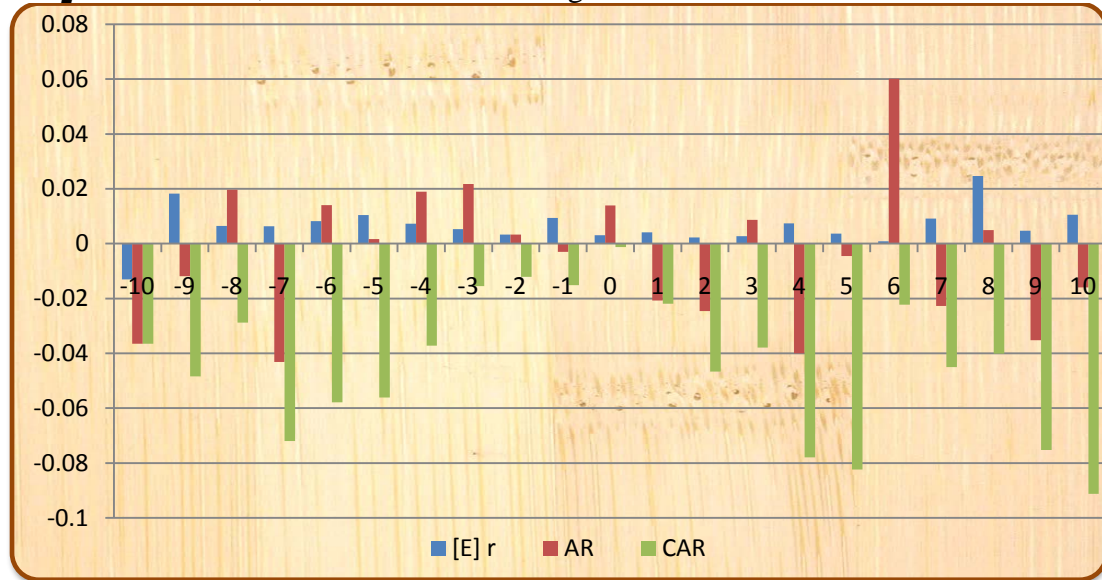
15. HERITAGE FOODS INDIA LIMITED: In case of Heritage Foods India limited, the abnormal return on the share prices show statistically significant positive abnormal return only on the 6th day after the acquisition announcement. For rest all days the abnormal returns are statistically insignificant. This indicates no impact of acquisition announcement on share price of the company. The CARs are negative for entire event window.

16. INDOCO REMEDIES LIMITED: In case of Indoco Remedies Limited, abnormal returns on share price are statistically non significant on all the days in the event window. Therefore, it could be mentioned here that acquisition announcement has not affected the share price of the company surrounding the event days as well as on the event day. The CARs are negative on some days in pre event period and are positive on all the days after the event.

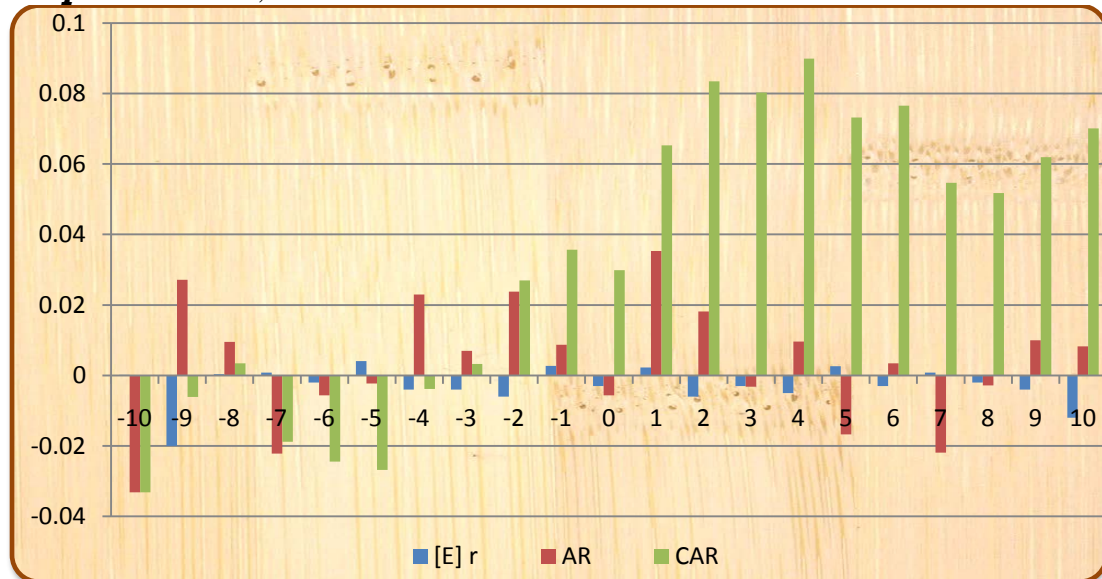
Table 6.17 [E]r, AR and CAR values of Heritage Foods India Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0130	-0.0365	-0.0365	-1.0235
-9	0.0183	-0.0119	-0.0484	-0.3344
-8	0.0065	0.0196	-0.0288	0.5511
-7	0.0064	-0.0432	-0.0720	-1.2122
-6	0.0082	0.0141	-0.0579	0.3964
-5	0.0104	0.0017	-0.0561	0.0487
-4	0.0073	0.0189	-0.0372	0.5297
-3	0.0053	0.0217	-0.0155	0.6095
-2	0.0033	0.0033	-0.0121	0.0931
-1	0.0094	-0.0030	-0.0151	-0.0840
0	0.0031	0.0139	-0.0012	-0.3903
1	0.0041	-0.0207	-0.0219	-0.5803
2	0.0022	-0.0246	-0.0466	-0.6915
3	0.0027	0.0087	-0.0379	0.2452
4	0.0074	-0.0400	-0.0779	-1.1208
5	0.0036	-0.0045	-0.0824	-0.1282
6	0.0008	0.0601	-0.0223	1.6857*
7	0.0092	-0.0227	-0.0450	-0.6359
8	0.0247	0.0049	-0.0401	0.1377
9	0.0047	-0.0352	-0.0753	-0.9876
10	0.0105	-0.0159	-0.0913	-0.4468

Note: * Significant at 10% level

Graph 6.15 ER, AR and CAR of Heritage Foods India Limited**Table 6.18** [E]r, AR and CAR values of Indoco Remedies Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0002	-0.0332	-0.0332	-0.5095
-9	-0.0200	0.0271	-0.0061	0.4160
-8	0.0003	0.0095	0.0034	0.1457
-7	0.0008	-0.0222	-0.0188	-0.3409
-6	-0.0020	-0.0057	-0.0245	-0.0880
-5	0.0041	-0.0023	-0.0268	-0.0354
-4	-0.0040	0.0230	-0.0038	0.3530
-3	-0.0040	0.0070	0.0032	0.1080
-2	-0.0060	0.0238	0.0270	0.3646
-1	0.0027	0.0087	0.0357	0.1336
0	-0.0030	-0.0057	0.0299	-0.0883
1	0.0022	0.0353	0.0653	0.5420
2	-0.0060	0.0181	0.0835	0.2781
3	-0.0030	-0.0032	0.0803	-0.0492
4	-0.0050	0.0096	0.0899	0.1482
5	0.0026	-0.0167	0.0732	-0.2568
6	-0.0030	0.0034	0.0766	0.0531
7	0.0008	-0.0219	0.0547	-0.3358
8	-0.0020	-0.0028	0.0518	-0.0442
9	-0.0040	0.0100	0.0619	0.1536
10	-0.0120	0.0082	0.0701	0.1266

Graph 6.16 ER, AR and CAR of Indoco Remedies Limited

17. JET AIRWAYS (INDIA) LIMITED: The abnormal returns on share prices for Jet Airways (India) Limited are negative and statistically significant on 7th and 10th day prior to event. The returns are positive and statistically significant on the event day and also one day after event. The results are similar to that of Godrej Limited, *i.e.* initially there was negative effect of announcement on the share price but then the effect is positive. The CAR values are negative in the pre event period, on the event day and it is positive on all the days in post event period. This indicates the positive effect of acquisition announcement on CARs on share prices of the acquirer company.

18. KIRLOSKAR BROTHERS LIMITED: The results of Kirloskar Brothers Limited are similar to GMR Infrastructure Limited. The abnormal returns on share prices are statistically significant on 2nd and 10th day prior to event. For rest all days in the event window the changes are statistically insignificant. The CARs are positive on majority of the event days, except on 3rd (-0.61%), 9th (-2.1%) and 10th (-0.64%) day prior to event day.

Table 6.19 [E]r, AR and CAR values of Jet Airways (India) Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0014	-0.0906	-0.0906	-3.0844***
-9	0.0004	0.0263	-0.0642	0.8973
-8	0.0021	-0.0010	-0.0653	-0.0360
-7	0.0022	-0.0579	-0.1233	-1.9735**
-6	0.0026	0.0298	-0.0934	1.0156
-5	0.0007	-0.0051	-0.0986	-0.1763
-4	0.0005	0.0094	-0.0892	0.3215
-3	0.0027	0.0033	-0.0858	0.1135
-2	0.0019	0.0003	-0.0855	0.0114
-1	0.0025	0.0030	-0.0825	0.1022
0	0.0007	0.0742	-0.0083	2.5264**
1	0.0021	0.0473	0.0390	1.6098*
2	0.0011	-0.0026	0.0363	-0.0903
3	0.0018	0.0004	0.0368	0.0166
4	0.0022	-0.0018	0.0350	-0.0615
5	0.0038	-0.0215	0.0134	-0.7346
6	0.0024	0.0082	0.0216	0.2798
7	0.0011	0.0032	0.0249	0.1103
8	0.0029	0.0011	0.0260	0.0388
9	0.0025	-0.0038	0.0222	-0.1295
10	0.0028	-0.0139	0.0083	-0.4739

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

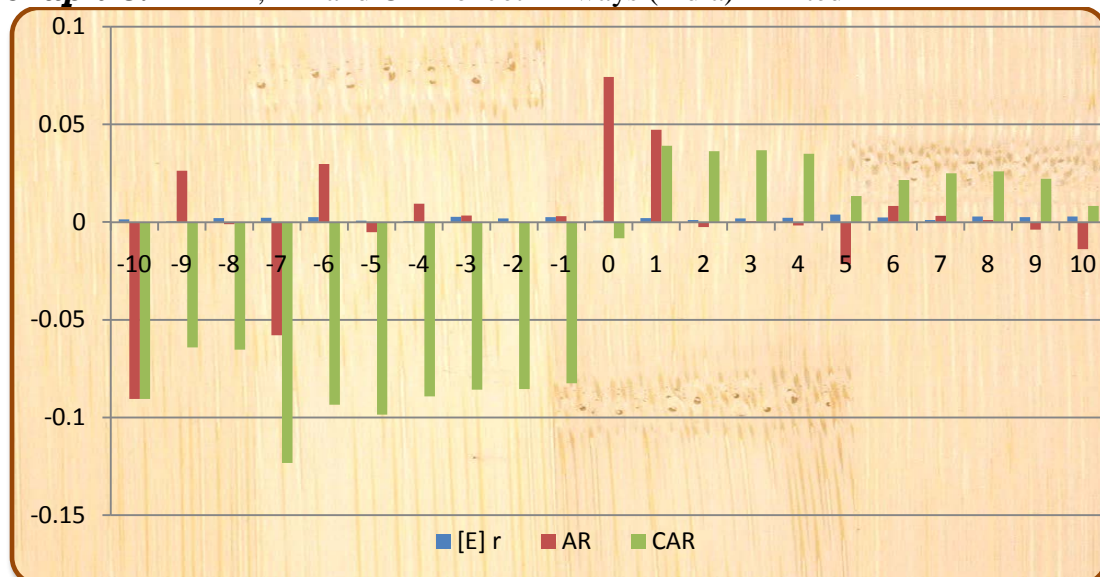
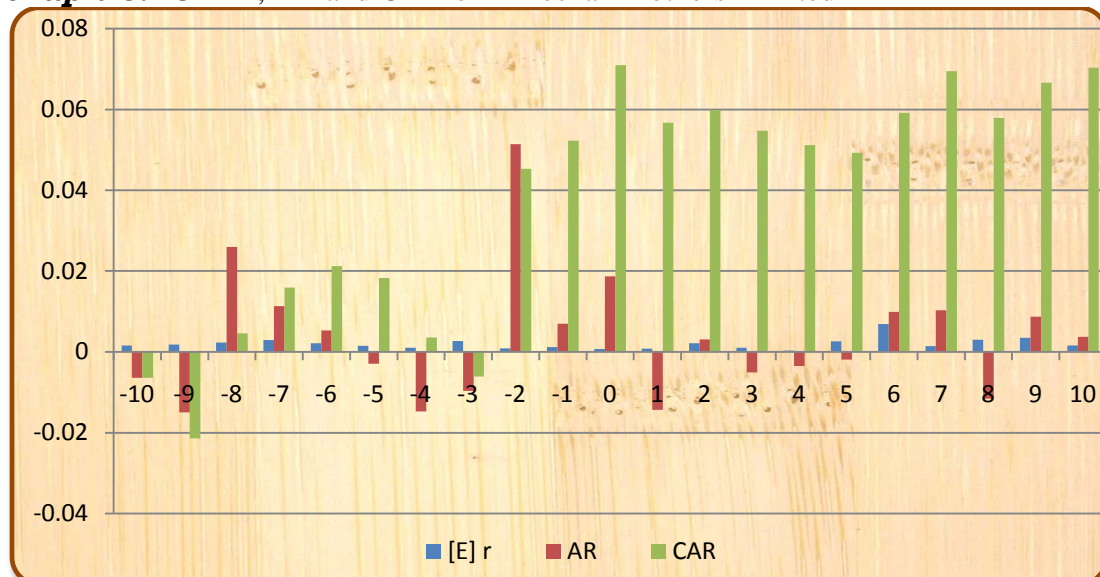
Graph 6.17 ER, AR and CAR of Jet Airways (India) Limited

Table 6.20 [E]r, AR and CAR values of Kirloskar Brothers Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0016	-0.0064	-0.0064	-1.9176**
-9	0.0018	-0.0150	-0.0214	-0.6816
-8	0.0023	0.0260	0.0046	1.1795
-7	0.0029	0.0113	0.0159	0.5162
-6	0.0021	0.0053	0.0212	0.2407
-5	0.0015	-0.0029	0.0183	-0.1318
-4	0.0010	-0.0147	0.0036	-0.6706
-3	0.0027	-0.0097	-0.0061	-0.4432
-2	0.0009	0.0514	0.0453	2.3317**
-1	0.0012	0.0070	0.0523	0.3200
0	0.0007	0.0187	0.0710	0.8516
1	0.0008	-0.0143	0.0567	-0.6511
2	0.0021	0.0031	0.0598	0.1442
3	0.0010	-0.0051	0.0547	-0.2310
4	0.0003	-0.0035	0.0512	-0.1593
5	0.0026	-0.0019	0.0493	-0.0903
6	0.0069	0.0099	0.0592	0.4499
7	0.0014	0.0103	0.0695	0.4703
8	0.0030	-0.0116	0.0579	-0.5296
9	0.0035	0.0087	0.0666	0.3948
10	0.0016	0.0037	0.0703	0.1701

Note: ** Significant at 5% level

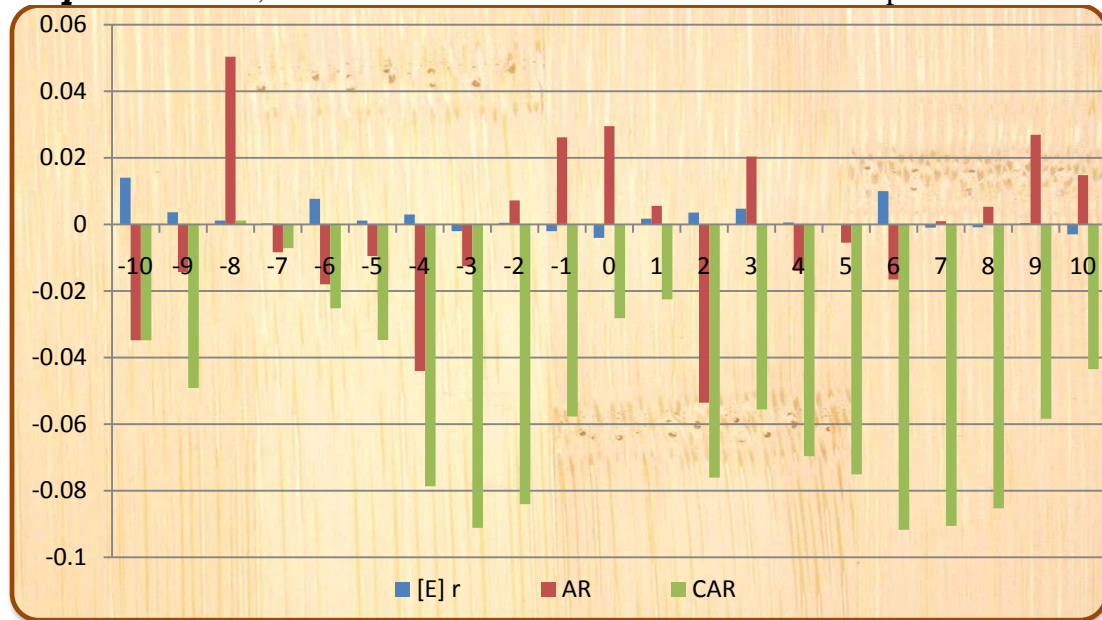
Graph 6.18 ER, AR and CAR of Kirloskar Brothers Limited

19. KOVAI MEDICAL CENTER & HOSPITAL LIMITED: The abnormal returns on the share prices are statistically significant on 4th day and 8th day prior to acquisition announcement, on the day of announcement and on 2nd day after announcement of acquisition. The CAR values are negative for entire event window except on 8th day (0.12%) prior to acquisition. The lowest value of CAR is -9.17% on the 6th day after the event day and highest value is 0.12% on 8th day prior to event. This range indicates very less changes in the CAR values over the entire event period as compared to other acquirer companies.

Table 6.21 [E]r, AR and CAR values of Kovai Medical Center & Hospital Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0140	-0.0348	-0.0348	-1.1015
-9	0.0037	-0.0143	-0.0491	-0.4531
-8	0.0012	0.0504	0.0012	1.5955*
-7	0.0003	-0.0084	-0.0071	-0.2672
-6	0.0077	-0.0180	-0.0252	-0.5710
-5	0.0012	-0.0095	-0.0347	-0.3013
-4	0.0030	-0.0440	-0.0787	-1.3917*
-3	-0.0020	-0.0125	-0.0912	-0.3953
-2	0.0005	0.0072	-0.0840	0.2293
-1	-0.0020	0.0262	-0.0577	0.8311
0	-0.0040	0.0295	-0.0282	1.9333*
1	0.0017	0.0056	-0.0225	0.1783
2	0.0036	-0.0536	-0.0761	-1.6953*
3	0.0047	0.0204	-0.0556	0.6480
4	0.0006	-0.0139	-0.0696	-0.4414
5	0.0001	-0.0055	-0.0751	-0.1749
6	0.0100	-0.0165	-0.0917	-0.5224
7	-0.0010	0.0010	-0.0906	0.0337
8	-0.0009	0.0053	-0.0853	0.1683
9	0.0004	0.0269	-0.0584	0.8507
10	-0.0030	0.0148	-0.0435	0.4694

Note: * Significant at 10% level

Graph 6.19 ER, AR and CAR of Kovai Medical Center and Hospitals Limited

20. LUPIN LIMITED: In case of Lupin Limited the abnormal returns on share price are statistically significant on 9th day prior to announcement on 6th day after the announcement of acquisition. The abnormal returns on both these days are negative indicating negative impact of event on share price of the company. The CAR values are negative from 5th day prior to event day till the date of acquisition announcement and again on the 6th day after the event date. The highest value of CAR is observed on 3rd day after acquisition *i.e.* 4.3%.

21. MODERN INDIA LIMITED: The abnormal returns on share prices are statistically significant on 8th day before event day and on 2nd 3rd 4th and 8th day after the event day. The changes are negative on 8th day prior to acquisition announcement and positive on 2nd 3rd 4th and 8th day after the announcement of acquisition. The results are similar to that of Godrej Limited and Jet Airways India Led. that initially market was reluctant for the event but then it positively accepts the company's decision. The CARs are negative on the day of acquisition announcement and during pre event window. The returns are positive in post event window. This strengthens the results shown by abnormal returns which are statistically significant and positive on 3days after the event window.

Table 6.22 [E]r, AR and CAR values of Lupin Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0030	0.0270	0.0270	1.1157
-9	-0.0003	-0.0268	0.0002	-1.3723*
-8	0.0003	0.0036	0.0038	0.0018
-7	-0.0007	0.0012	0.0050	0.0661
-6	-0.0030	0.0071	0.0121	0.3629
-5	-0.0002	-0.0134	-0.0013	-0.6872
-4	-0.0009	-0.0160	-0.0173	-0.8182
-3	-0.0010	0.0001	-0.0172	0.0065
-2	-0.0003	-0.0023	-0.0195	-0.1195
-1	-0.0002	0.0086	-0.0109	0.4432
0	-0.0009	0.0094	-0.0015	0.4810
1	-0.0006	0.0026	0.0011	0.1334
2	-0.0002	0.0211	0.0222	1.0787
3	-0.0020	0.0208	0.0430	1.0638
4	0.0002	-0.0150	0.0280	-0.7709
5	-0.0006	0.0072	0.0352	0.3691
6	0.0009	-0.0450	-0.0098	-2.3004**
7	-0.0030	0.0147	0.0049	0.7545
8	-0.0010	0.0060	0.0109	0.3109
9	-0.0006	0.0058	0.0167	0.2985
10	0.0012	0.0085	0.0252	0.4376

Note: * Significant at 10% level, ** Significant at 5% level

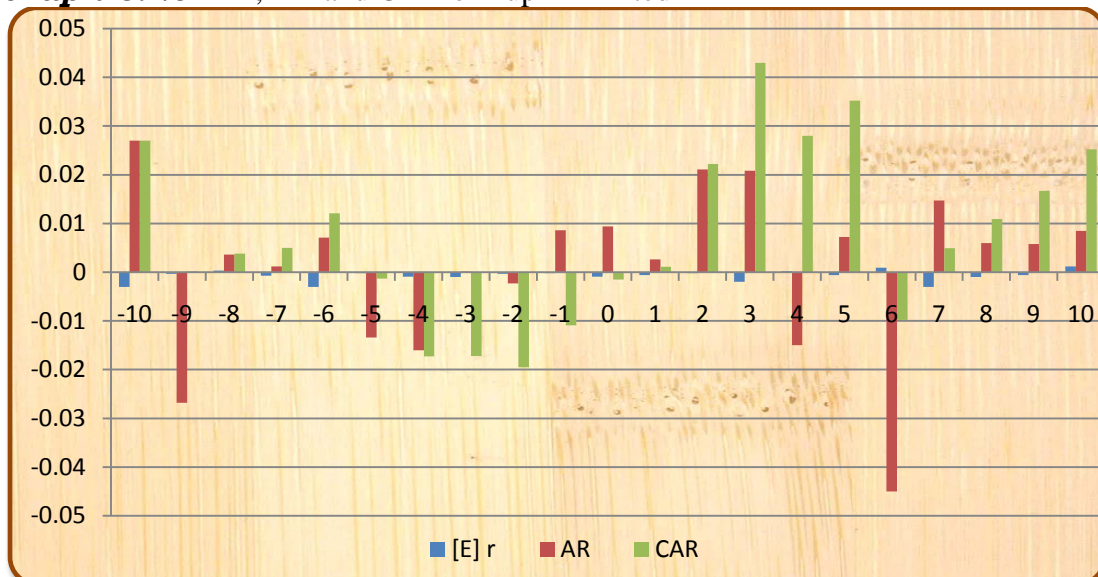
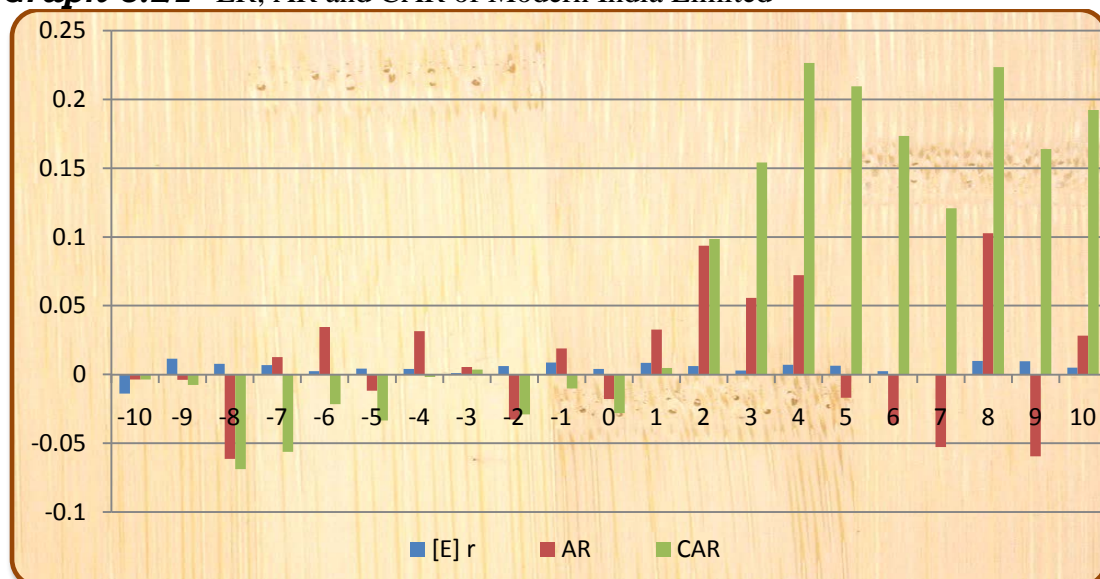
Graph 6.20 ER, AR and CAR of Lupin Limited

Table 6.23 [E]r, AR and CAR values of Modern India Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0140	-0.0037	-0.0037	-0.0910
-9	0.0114	-0.0038	-0.0075	-0.0922
-8	0.0077	-0.0613	-0.0688	-1.4878*
-7	0.0067	0.0126	-0.0562	0.3057
-6	0.0024	0.0345	-0.0216	0.8394
-5	0.0043	-0.0117	-0.0334	-0.2860
-4	0.0040	0.0315	-0.0018	0.7665
-3	0.0011	0.0054	0.0036	0.1333
-2	0.0062	-0.0327	-0.0291	-0.7946
-1	0.0087	0.0189	-0.0101	0.4603
0	0.0040	-0.0178	-0.0280	-0.4331
1	0.0085	0.0327	0.0047	0.7955
2	0.0061	0.0936	0.0984	2.2738**
3	0.0029	0.0557	0.1542	1.3523*
4	0.0071	0.0722	0.2264	1.7544**
5	0.0063	-0.0170	0.2094	-0.4135
6	0.0024	-0.0358	0.1735	-0.8704
7	0.0002	-0.0527	0.1208	-1.2807
8	0.0098	0.1026	0.2235	2.4921**
9	0.0097	-0.0595	0.1639	-1.1451
10	0.0049	0.0283	0.1923	0.6887

Note: * Significant at 10% level, ** Significant at 5% level

Graph 6.21 ER, AR and CAR of Modern India Limited

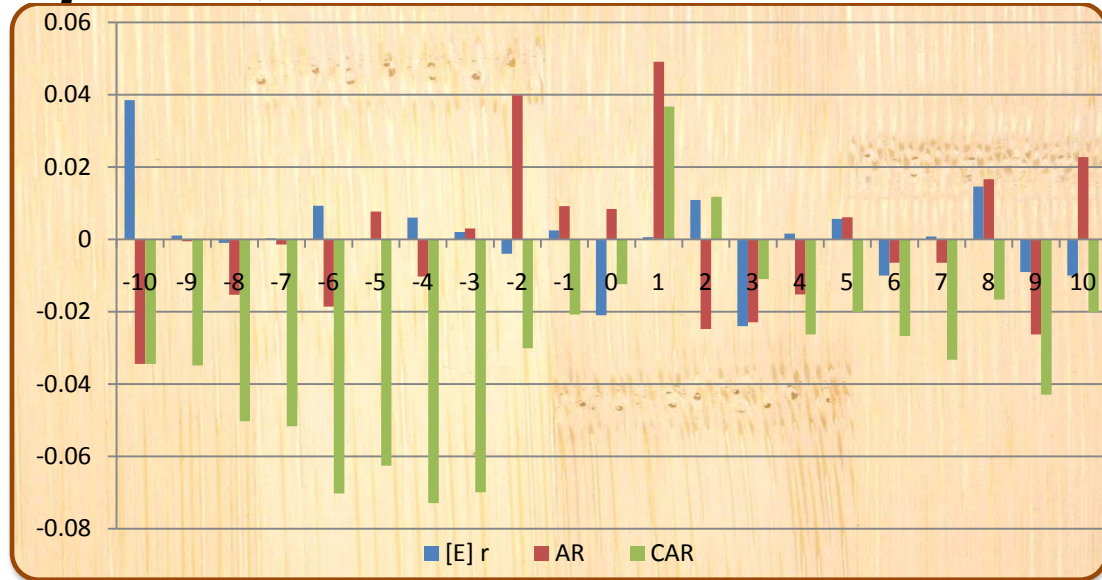
22. NILKAMAL LIMITED: For Nilkamal Limited the abnormal returns on share prices are positive and statistically significant only on one day *i.e.* on 1st day after acquisition announcement. This shows that acquisition announcement has not affected the share prices of the company much. The CARs are negative on all the days of event window except on 1st (3.67%) and 2nd (1.18%) day after the event window.

23. PIDILITE INDUSTRIES LIMITED: In case of Pidilite Industries Limited abnormal return on share price is statistically insignificant on all the days in the event window except on the 4th day prior to acquisition announcement. So it reflects that the acquisition announcement has not affected the share price of the company much surrounding the event days. The CAR values are negative during entire event window. The highest value of CAR is -2.17% on the 7th day prior the event day and the lowest value is -9.02% on the 2nd day prior to the event day.

Table 6.24 [E]r, AR and CAR values of Nilkamal Limited

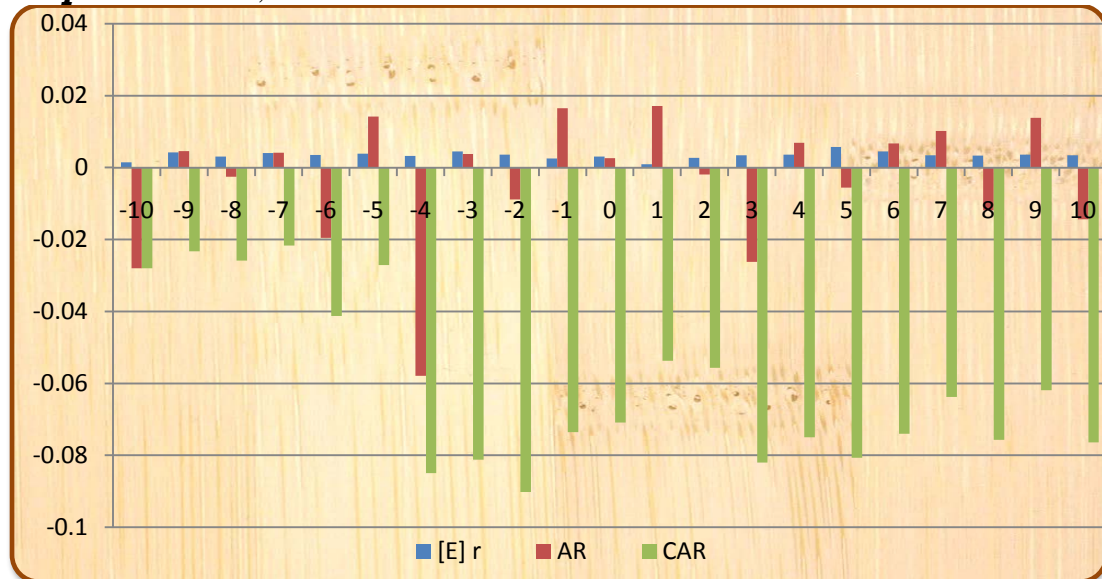
Days	[E] r	AR	CAR	t-test on AR
-10	0.0385	-0.0344	-0.0344	-1.1394
-9	0.0011	-0.0005	-0.0349	-0.0171
-8	-0.0010	-0.0153	-0.0503	-0.5061
-7	0.0003	-0.0014	-0.0517	-0.0488
-6	0.0093	-0.0186	-0.0703	-0.6149
-5	0.0002	0.0077	-0.0626	0.2561
-4	0.0060	-0.0103	-0.0729	-0.3419
-3	0.0020	0.0030	-0.0699	0.0994
-2	-0.0040	0.0398	-0.0301	1.3166
-1	0.0025	0.0092	-0.0208	0.3071
0	-0.0210	0.0084	-0.0124	0.2783
1	0.0006	0.0491	0.0367	1.6251*
2	0.0109	-0.0248	0.0118	-0.8218
3	-0.0240	-0.0229	-0.0110	-0.7591
4	0.0016	-0.0152	-0.0263	-0.5045
5	0.0057	0.0061	-0.0201	0.2043
6	-0.0100	-0.0065	-0.0267	-0.2176
7	0.0008	-0.0065	-0.0333	-0.2176
8	0.0146	0.0166	-0.0166	0.5509
9	-0.0090	-0.0263	-0.0429	-0.8698
10	-0.0100	0.0227	-0.0202	0.7533

Note: * Significant at 10% level

Graph 6.22 ER, AR and CAR of Nilkamal Limited**Table 6.25** [E]r, AR and CAR values of Pidilite Industries Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0015	-0.0280	-0.0280	-1.2253
-9	0.0042	0.0046	-0.0233	0.2038
-8	0.0031	-0.0025	-0.0259	-0.1134
-7	0.0040	0.0041	-0.0217	0.1826
-6	0.0035	-0.0195	-0.0413	-0.8569
-5	0.0039	0.0142	-0.0271	0.6218
-4	0.0032	-0.0579	-0.0850	-2.5332*
-3	0.0045	0.0038	-0.0812	0.1670
-2	0.0036	-0.0089	-0.0902	-0.3918
-1	0.0025	0.0165	-0.0736	0.7241
0	0.0031	0.0026	-0.0709	0.1170
1	0.0009	0.0171	-0.0537	0.7519
2	0.0027	-0.0019	-0.0557	-0.0861
3	0.0034	-0.0262	-0.0820	-1.1483
4	0.0036	0.0069	-0.0750	0.3028
5	0.0057	-0.0056	-0.0807	-0.2487
6	0.0045	0.0067	-0.0740	0.2944
7	0.0034	0.0102	-0.0638	0.4463
8	0.0033	-0.0119	-0.0757	-0.5226
9	0.0036	0.0138	-0.0619	0.6036
10	0.0034	-0.0144	-0.0764	-0.6328

Note: * Significant at 10% level

Graph 6.23 ER, AR and CAR of Pidilite Industries Limited

24. SATRA PROPERTIES INDIA LIMITED: The abnormal returns on share prices are statistically significant and positive on 3rd and 10th day prior to acquisition announcement and statistically significant but negative on 3rd 4th and 9th after the acquisition announcement. The abnormal return on share prices are positive on all days prior event day and negative on the days after acquisition announcement. The CAR values are positive on all the days of pre event period and up to 2nd day after the event day. The CAR values are negative from the 3rd till 10th day after the event. This shows negative effect of acquisition announcement on share price, which is also indicated by the AR values and t values on AR.

25. S. KUMAR NATIONWIDE LIMITED: The abnormal returns on share prices are statistically significant on 2nd and 3rd day prior to acquisition announcement and on 2nd and 6th after the acquisition announcement. The changes in abnormal return on share prices are positive on all days except on 6th day after event day. This suggests that acquisition announcement has positive impact on the share price of the company in the event window of (-3, +2) days. The CARs are positive over entire event window except on 6th (-0.34%) and 7th (-0.12%) prior to acquisition announcement.

Table 6.26 [E]r, AR and CAR values of Satra Properties India Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0061	0.0327	0.0327	1.8320 ^{**}
-9	0.0053	0.0068	0.0395	0.3816
-8	0.0059	0.0071	0.0467	0.4009
-7	0.0056	0.0079	0.0547	0.4464
-6	0.0057	0.0005	0.0552	0.0314
-5	0.0061	-0.0277	0.0275	-0.5528
-4	0.0054	-0.0038	0.0236	-0.2160
-3	0.0051	0.0357	0.0594	2.0018 ^{**}
-2	0.0057	-0.0075	0.0519	-0.4220
-1	0.0051	0.0144	0.0663	0.8087
0	0.0054	-0.0052	0.0611	-0.2937
1	0.0058	0.0061	0.0672	0.3430
2	0.0053	-0.0022	0.0649	-0.1259
3	0.0054	-0.7966	-0.7316	-4.5691 ^{***}
4	0.0059	-0.0272	-0.7589	-1.5247 [*]
5	0.0062	-0.0038	-0.7627	-0.2156
6	0.0049	-0.0142	-0.7770	-0.7978
7	0.0049	-0.0070	-0.7840	-0.3937
8	0.0056	-0.0160	-0.8001	-0.8985
9	0.0058	-0.0381	-0.8382	-2.1345 ^{**}
10	0.0057	0.0107	-0.8275	0.6003

Note: ** Significant at 5% level, *** Significant at 1% Level

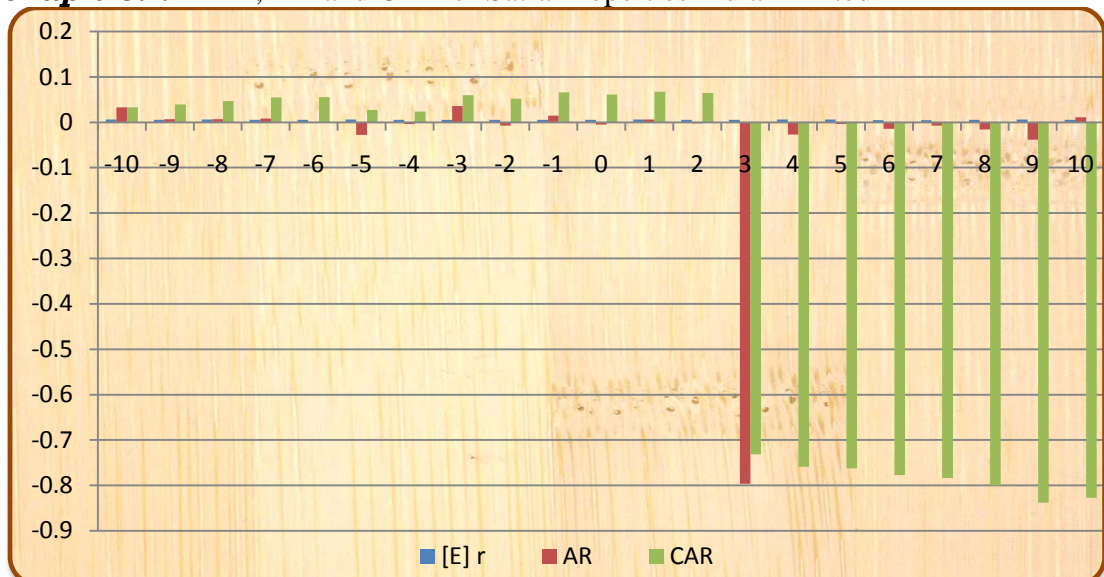
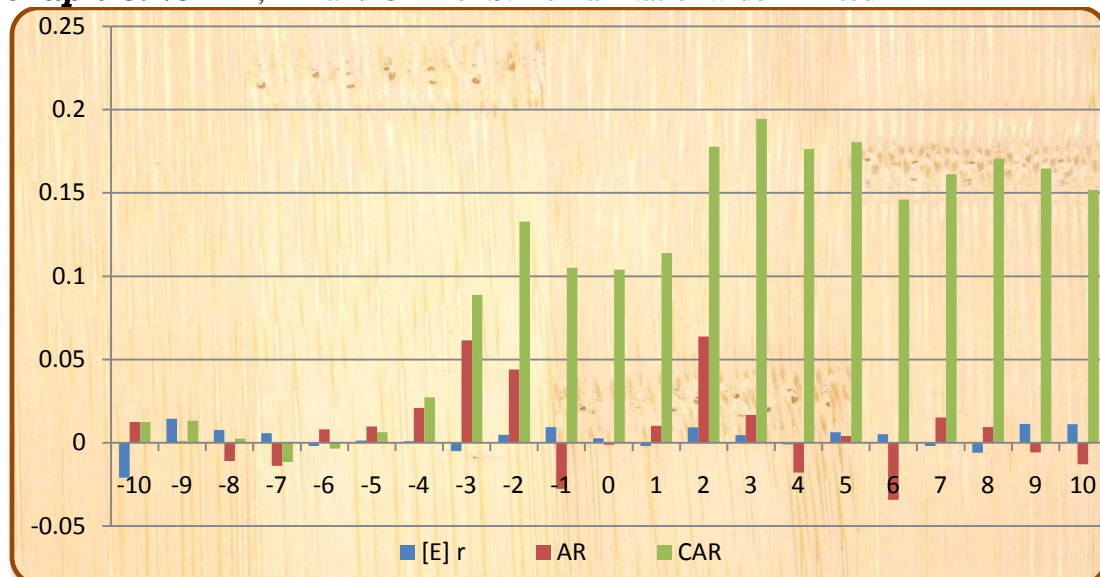
Graph 6.24 ER, AR and CAR of Satra Properties India Limited

Table 6.27 [E]r, AR and CAR values of S. Kumar Nationwide Ltd.

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0210	0.0125	0.0125	0.5256
-9	0.0143	0.0008	0.0133	0.0372
-8	0.0076	-0.0109	0.0024	-0.4813
-7	0.0057	-0.0139	-0.0115	-0.6155
-6	-0.0020	0.0081	-0.0034	0.3610
-5	0.0013	0.0097	0.0063	0.4312
-4	0.0009	0.0210	0.0273	0.9297
-3	-0.0050	0.0614	0.0887	2.7082***
-2	0.0048	0.0440	0.1327	1.9407**
-1	0.0094	-0.0277	0.105	-1.2259
0	0.0026	-0.0011	0.1039	-0.0510
1	-0.0020	0.0101	0.114	0.4465
2	0.0091	0.0637	0.1777	2.8112***
3	0.0046	0.0167	0.1944	0.7389
4	-0.0010	-0.0180	0.1764	-0.7950
5	0.0064	0.0040	0.1804	0.1778
6	0.0051	-0.0343	0.1461	-1.5143*
7	-0.0020	0.0151	0.1612	0.6702
8	-0.0060	0.0093	0.1705	0.4132
9	0.0114	-0.0058	0.1647	-0.2595
10	0.0112	-0.0129	0.1518	-0.5728

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

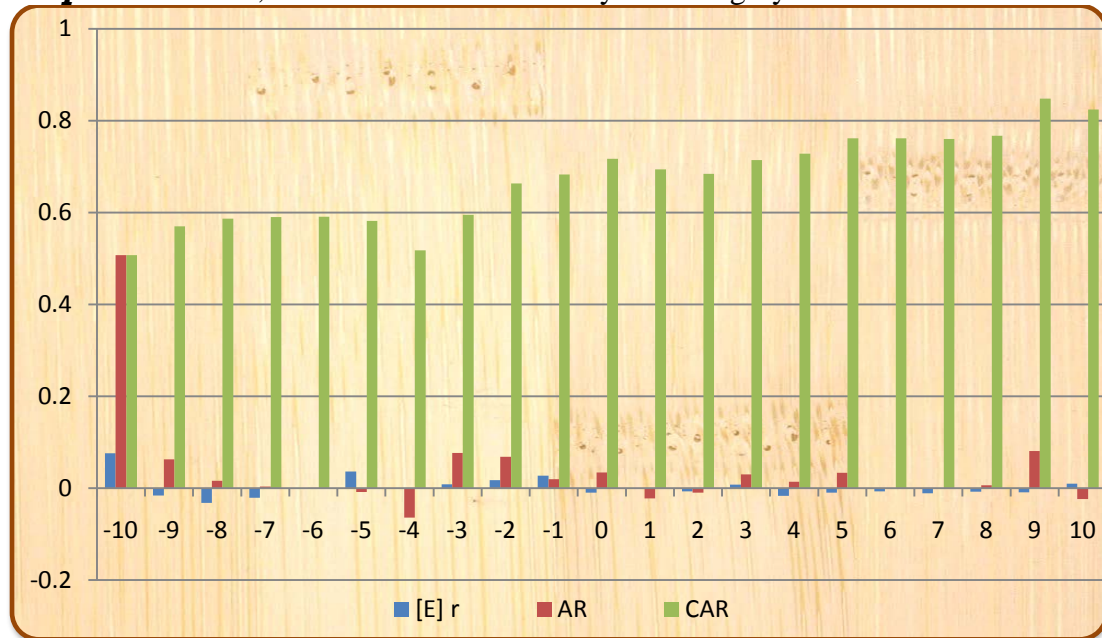
Graph 6.25 ER, AR and CAR of S. Kumar Nationwide Limited

26. SONA KOYO STEERING SYSTEMS LIMITED: The abnormal returns on share prices of Sona Koyo Steering Systems Limited are statistically significant and positive on 2nd 3rd 9th and 10th day prior to acquisition announcement and on 3rd 5th and 9th after acquisition announcement. It is also statistically significant on the event day. The positive significant abnormal return on all the above days indicates that market has positively responded to the acquisition event. The CARs are positive for the entire event window. Overall the CARs show increasing trend except few days on account of negative insignificant abnormal returns. The highest value of CAR is 84.79% and lowest value of CAR is 50.73% which is on the 10th day prior to and on 9th day after the event day. This indicates high CARs over the event window for Sona Koyo Steering Systems Limited as compared to other acquirer firms in the sample. This is because of high value of abnormal return on the first day of event window *i.e.* on the 10th prior to announcement of acquisition.

Table 6.28 [E]r, AR and CAR values of Sona Koyo Steering Systems Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0760	0.5073	0.5073	1.5739*
-9	-0.0160	0.0630	0.5703	3.0527***
-8	-0.0320	0.0163	0.5866	0.7917
-7	-0.0210	0.0034	0.5901	0.1666
-6	0.0002	0.0004	0.5906	0.0229
-5	0.0361	-0.0085	0.5820	-0.4135
-4	-0.0010	-0.0638	0.5181	-0.0939
-3	0.0085	0.0769	0.5951	3.7286***
-2	0.0171	0.0685	0.6637	3.3207***
-1	0.0271	0.0193	0.6830	0.9348
0	-0.0100	0.0340	0.7170	1.8490**
1	-0.0006	-0.0226	0.6943	-1.0984
2	-0.0070	-0.0100	0.6843	-0.4865
3	0.0076	0.0301	0.7144	1.4589*
4	-0.0170	0.0137	0.7282	0.6653
5	-0.0100	0.0335	0.7618	1.6272*
6	-0.0070	-0.0003	0.7614	-0.0169
7	-0.0110	-0.0009	0.7605	-0.0460
8	-0.0080	0.0066	0.7671	0.3220
9	-0.0090	0.0808	0.8479	3.9136***
10	0.0100	-0.0237	0.8242	-1.1493

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

Graph 6.26 ER, AR and CAR of Sona Koyo Steering Systems Limited

27. S P APPARELS LIMITED: The statistically significant abnormal returns on the share price are observed on post event days in case of S P Apparels Limited. The abnormal returns are significant on 6th 7th and 9th day after acquisition announcement. The CARs are positive for the entire event window. The highest CAR observed is 35.97% on the 9th day after the event window.

28. SPECIALITY PAPERS LIMITED: The abnormal returns on share prices are statistically significant and negative on 4th day prior to acquisition and on 1st day after acquisition. The abnormal returns are positive on the event day and on 3rd day after the event day. The CAR values are negative from 7th day prior to event day to 2nd day after the event and also on 10th day prior to event day. The CARs are positive after 3rd day of acquisition announcement.

Table 6.29 [E]r, AR and CAR values of S P Apparels Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.1706	0.0450	0.0450	-0.5011
-9	-0.0005	0.2200	0.2650	-0.7597
-8	-0.0200	-0.0121	0.2529	-0.3700
-7	0.0571	-0.0166	0.2363	-0.5077
-6	0.0261	-0.0249	0.2114	-0.7629
-5	0.0104	0.0130	0.2244	0.3985
-4	-0.0270	0.0016	0.2260	0.0499
-3	0.0439	-0.0280	0.1980	-0.8570
-2	-0.0006	0.0069	0.2049	0.2125
-1	-0.0230	-0.0031	0.2018	-0.0957
0	-0.0490	0.0170	0.2188	0.5218
1	-0.0310	-0.0070	0.2118	-0.2141
2	0.0037	-0.0092	0.2026	-0.2821
3	0.0632	-0.0383	0.1643	-1.1708
4	0.0012	-0.0002	0.1641	-0.0085
5	0.0175	0.0333	0.1974	1.0180
6	0.0318	-0.0463	0.1511	-1.4157*
7	0.0483	-0.0546	0.0965	-1.6667*
8	-0.0130	0.0068	0.1033	0.2083
9	0.0033	0.2564	0.3597	7.8294***
10	-0.0070	-0.0084	0.3513	-0.2591

Note: * Significant at 10% level, *** Significant at 1% Level

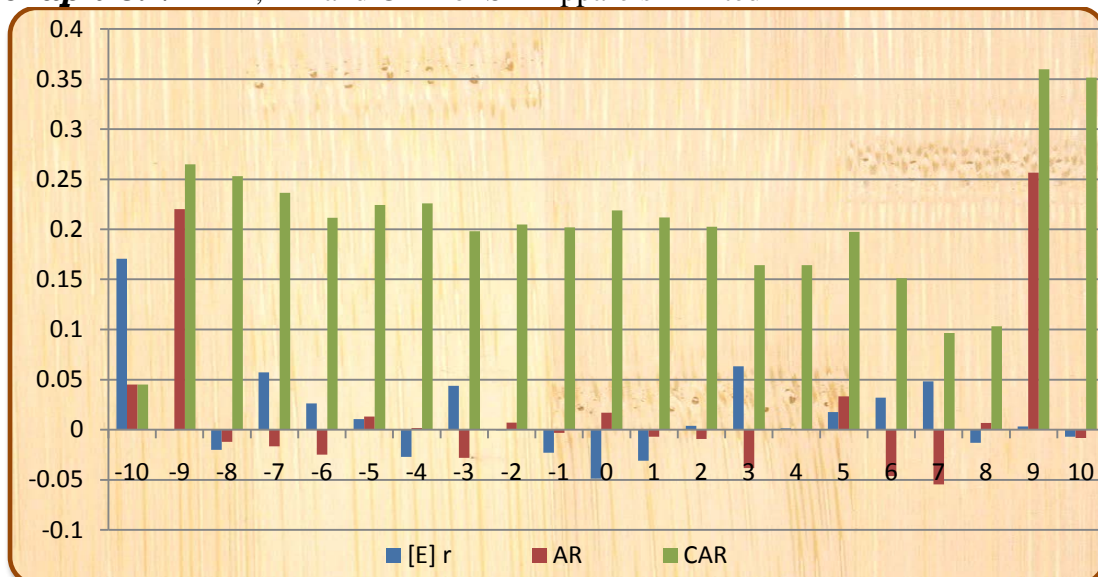
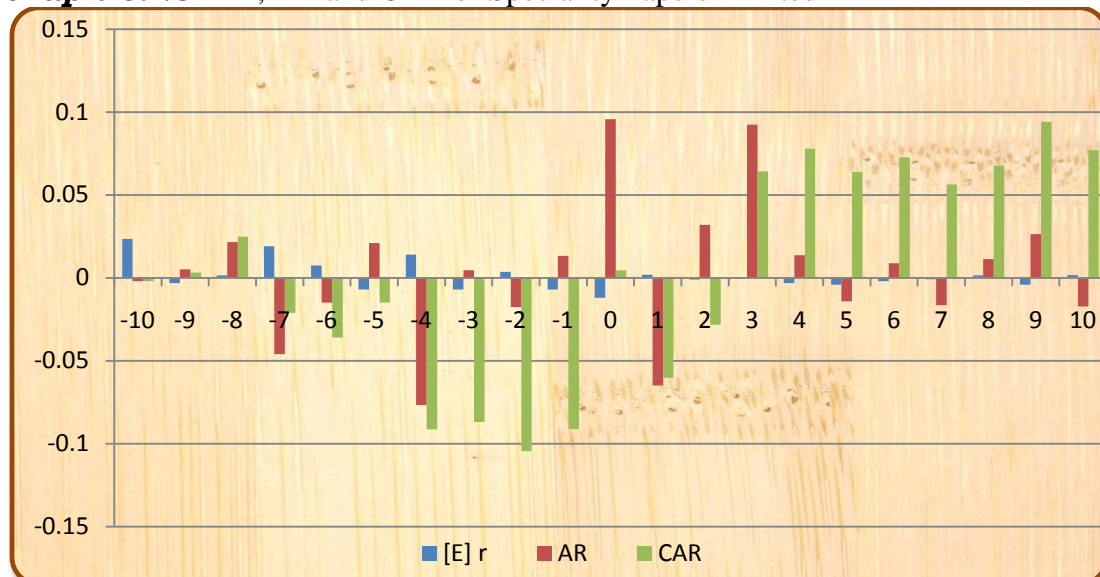
Graph 6.27 ER, AR and CAR of S P Apparels Limited

Table 6.30 [E]r, AR and CAR values of Speciality Papers Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0235	-0.0027	-0.0027	-0.9017
-9	-0.0030	0.0053	0.0033	0.1520
-8	0.0016	0.0216	0.0249	0.6167
-7	0.0192	-0.0459	-0.0210	-1.3105
-6	0.0075	-0.0149	-0.0359	-0.4261
-5	-0.0070	0.0211	-0.0148	0.6049
-4	0.0140	-0.0766	-0.0914	-2.1894**
-3	-0.0070	0.0046	-0.0868	0.1315
-2	0.0036	-0.0176	-0.1044	-0.5023
-1	-0.0070	0.0133	-0.0911	0.3820
0	-0.0120	0.0958	0.0047	2.7355***
1	0.0019	-0.0649	-0.0602	-1.8534**
2	-0.0010	0.0320	-0.0282	0.9151
3	-0.0001	0.0924	0.0642	2.6398***
4	-0.0030	0.0137	0.0779	0.3910
5	-0.0040	-0.0140	0.0639	-0.3999
6	-0.0020	0.0089	0.0728	0.2551
7	-0.0007	-0.0164	0.0564	-0.4702
8	0.0016	0.0114	0.0678	0.3268
9	-0.0040	0.0264	0.0942	0.7556
10	0.0018	-0.0171	0.0771	-0.4890

Note: ** Significant at 5% level, *** Significant at 1% Level

Graph 6.28 ER, AR and CAR of Speciality Papers Limited

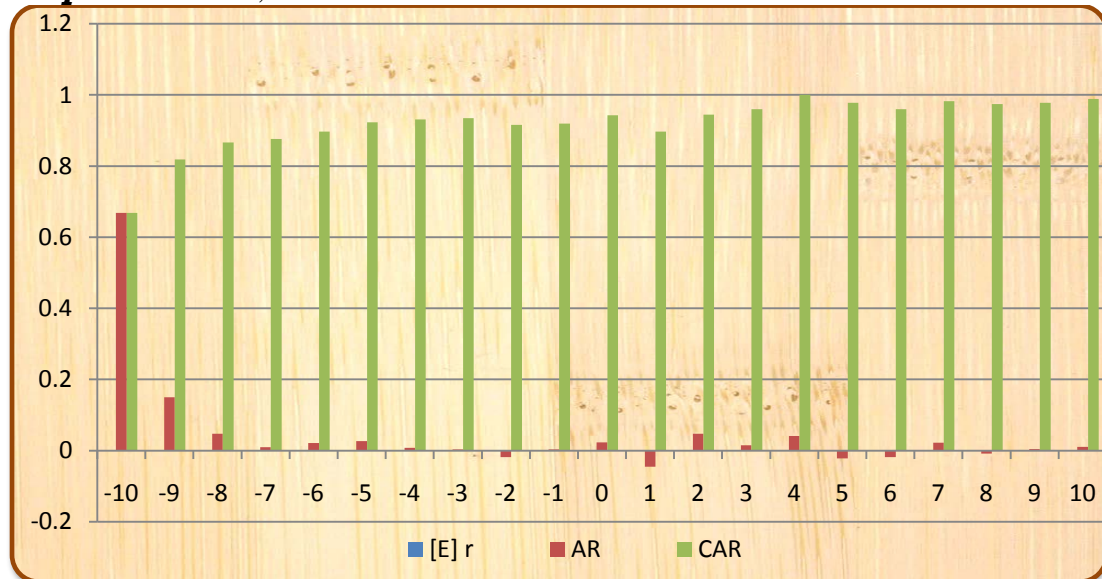
29. STRIDES ACROLAB LIMITED: For Strides Acrolab limited, the abnormal return on share prices is statistically significant and positive on 8th and 9th day prior to acquisition announcement and on 2nd and 4th day after acquisition announcement, however it is significantly negative on 1st day after the event day. The CAR values are positive over the entire event window ranging between 66.81% to 97.08%.

30. SUNDRAM FASTENERS LIMITED: The abnormal returns on share prices are statistically significant and negative on 1st and 3rd day prior to acquisition and on 9th and 10th day after acquisition. It is positively significant only on event day. The CAR values are negative over the entire event window. The highest value is -0.92% and the lowest value is -25.65%. This shows that acquisition has negatively affected the share price of the acquirer company.

Table 6.31 [E]r, AR and CAR values of Strides Acrolab limited

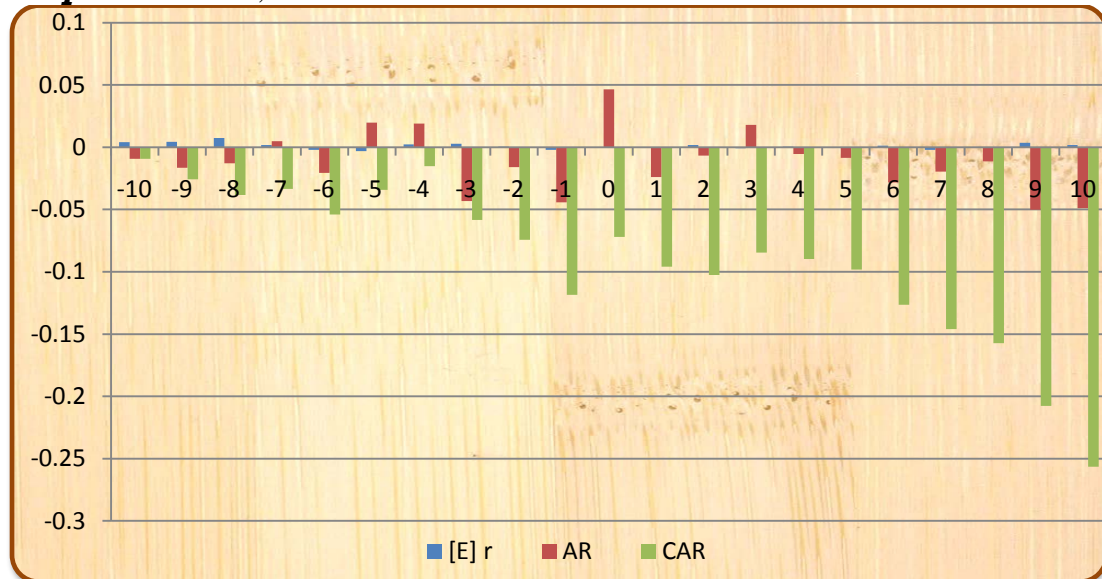
Days	[E] r	AR	CAR	AR T-test
-10	0.0009	0.6681	0.6681	1.1745
-9	0.0012	0.1500	0.8181	1.9551 ^{**}
-8	0.0013	0.0476	0.8657	1.9290 ^{**}
-7	0.0012	0.0100	0.8758	0.4068
-6	0.0013	0.0209	0.8968	0.8491
-5	0.0013	0.0263	0.9231	1.0641
-4	0.0012	0.0077	0.9308	0.3119
-3	0.0014	0.0034	0.9342	0.1377
-2	0.0013	-0.0181	0.9160	-0.7357
-1	0.0013	0.0035	0.9196	0.1438
0	0.0013	0.0231	0.9427	0.9359
1	0.0012	-0.0456	0.8970	-1.8486 ^{**}
2	0.0013	0.0476	0.9446	1.9282 ^{**}
3	0.0011	-0.0146	0.9300	0.5943
4	0.0013	0.0407	0.9708	1.6506 [*]
5	0.0013	-0.0222	0.9485	-0.9009
6	0.0011	-0.0179	0.9305	-0.7261
7	0.0012	0.0221	0.9527	0.8946
8	0.0012	-0.0080	0.9446	-0.3258
9	0.0013	0.0040	0.9487	0.1643
10	0.0013	0.0109	0.9596	0.4413

Note: * Significant at 10% level, ** Significant at 5% level

Graph 6.29 ER, AR and CAR of Strides Acrolab Limited**Table 6.32** [E]r, AR and CAR values of Sundram Fasteners Ltd.

Days	[E] r	AR	CAR	t-test on AR
-10	0.0042	-0.0092	-0.0092	-0.7205
-9	0.0044	-0.0164	-0.0256	-0.6123
-8	0.0075	-0.0128	-0.0384	-0.4794
-7	0.0019	0.0050	-0.0334	0.1878
-6	-0.0020	-0.0206	-0.0540	-0.7719
-5	-0.0030	0.0198	-0.0342	0.7396
-4	0.0022	0.0191	-0.0151	0.7152
-3	0.0029	-0.0432	-0.0583	-1.6167*
-2	0.0005	-0.0160	-0.0743	-0.6002
-1	-0.0020	-0.0443	-0.1186	-1.6568*
0	-0.0002	0.0466	-0.0720	1.7428**
1	0.0001	-0.0239	-0.0959	-0.8932
2	0.0018	-0.0066	-0.1025	-0.2490
3	-0.0008	0.0180	-0.0845	0.6722
4	0.0006	-0.0053	-0.0898	-0.2012
5	-0.0005	-0.0084	-0.0982	-0.3142
6	0.0014	-0.0283	-0.1265	-1.0568
7	-0.0020	-0.0195	-0.1460	-0.7307
8	0.0003	-0.0114	-0.1574	-0.4280
9	0.0035	-0.0502	-0.2076	-1.8763**
10	0.0018	-0.0489	-0.2565	-1.8282**

Note: * Significant at 10% level, ** Significant at 5% level

Graph 6.30 ER, AR and CAR of Sundram Fasteners Limited

31. SYSTEMATIX CORPORATE SERVICES LIMITED: In case of Systematix Corporate Services Limited, the abnormal return on share price is statistically insignificant on all the days in the event window. This reflects that the acquisition announcement has not affected the share price of the company on and surrounding the event. The CAR values are positive over the entire event window, with highest value of 25.97% on 4th day after the event day and lowest value of 4.13% on the 10th day prior to event day. The high values of CAR are observed in case of Systematix Corporate Services Limited as compared to other acquirer firms in the sample.

32. TATA POWERS LIMITED: The abnormal return on share prices are statistically significant and positive on 1st 5th and 8th day prior to acquisition and on 1st 2nd and 6th day after acquisition and also on the event day. The CARs are negative on most of the days in pre event period and they are positive on all the days in post event period.

Table 6.33 [E]r, AR and CAR values of Systematix Corporate Services Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0060	0.0413	0.0413	0.9847
-9	-0.0020	0.0519	0.0932	1.2373
-8	0.0022	0.0468	0.1400	1.1157
-7	0.0031	0.0081	0.1481	0.1940
-6	-0.0030	0.0248	0.1729	0.5915
-5	0.0081	0.0195	0.1924	0.4650
-4	0.0002	0.0087	0.2011	0.2077
-3	-0.0010	0.0059	0.2071	0.1417
-2	0.0086	-0.0254	0.1817	-0.6059
-1	0.0053	-0.0003	0.1813	-0.0091
0	0.0043	0.0200	0.2013	0.4782
1	0.0006	-0.0450	0.1563	-1.0728
2	0.0022	0.0468	0.2031	1.1156
3	0.0020	0.0138	0.2170	0.3302
4	-0.0006	0.0427	0.2597	1.0187
5	0.0039	-0.0248	0.2349	-0.5920
6	0.0062	-0.0229	0.2119	-0.5475
7	0.0020	0.0213	0.2332	0.5082
8	0.0060	-0.0128	0.2204	-0.3058
9	0.0038	0.0015	0.2219	0.0361
10	0.0010	0.0111	0.2331	0.2662

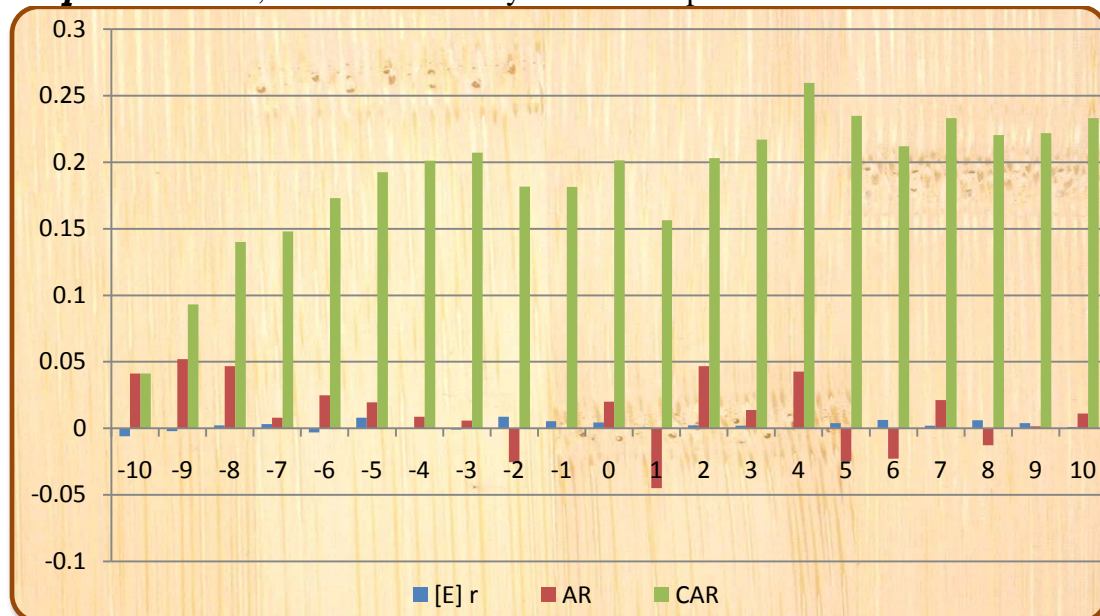
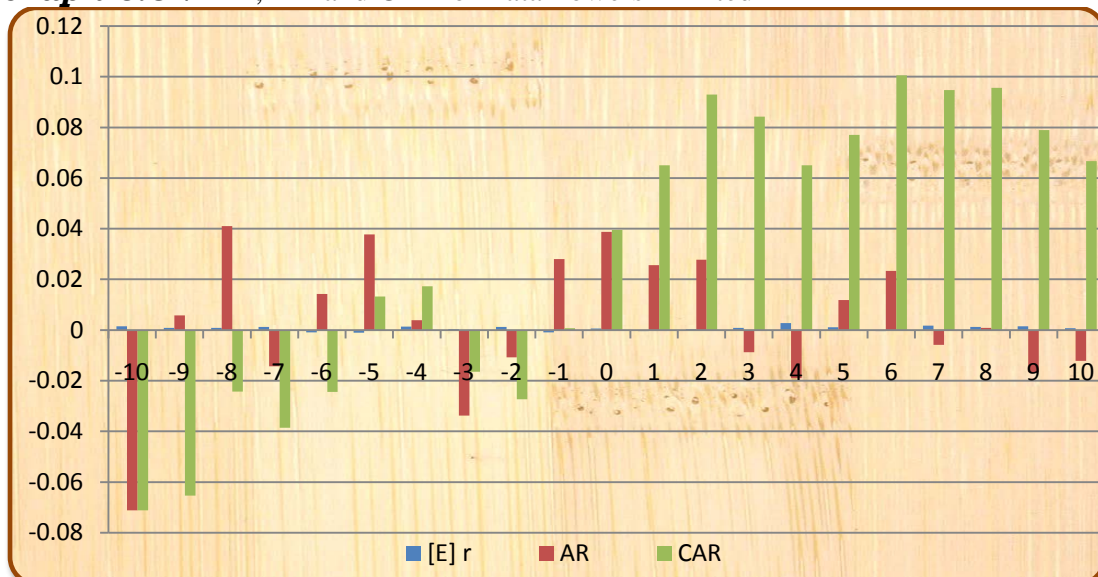
Graph 6.31 ER, AR and CAR of Systematix Corporate Services Limited

Table 6.34 [E]r, AR and CAR values of Tata Powers Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0015	-0.0712	-0.0712	-0.2253
-9	0.0008	0.0058	-0.0654	0.3457
-8	0.0009	0.0410	-0.0243	2.4344**
-7	0.0013	-0.0143	-0.0386	-0.8488
-6	-0.0009	0.0142	-0.0244	0.8473
-5	-0.0010	0.0377	0.0133	2.2403**
-4	0.0014	0.0039	0.0173	0.2348
-3	0.0004	-0.0338	-0.0164	1.0055
-2	0.0012	-0.0108	-0.0273	-0.6427
-1	-0.0009	0.0280	0.0007	1.6626*
0	0.0006	0.0388	0.0395	2.3005**
1	-0.0004	0.0256	0.0651	1.5178*
2	0.0004	0.0278	0.0929	1.6493*
3	0.0008	-0.0087	0.0842	-0.5162
4	0.0027	-0.0190	0.0651	-1.1298
5	0.0011	0.0118	0.0770	0.7039
6	-0.0004	0.0234	0.1005	1.3920*
7	0.0017	-0.0058	0.0947	-0.3451
8	0.0012	0.0009	0.0956	0.0587
9	0.0015	-0.0166	0.0790	-0.9883
10	0.0007	-0.0122	0.0667	-0.7264

Note: * Significant at 10% level, ** Significant at 5% level

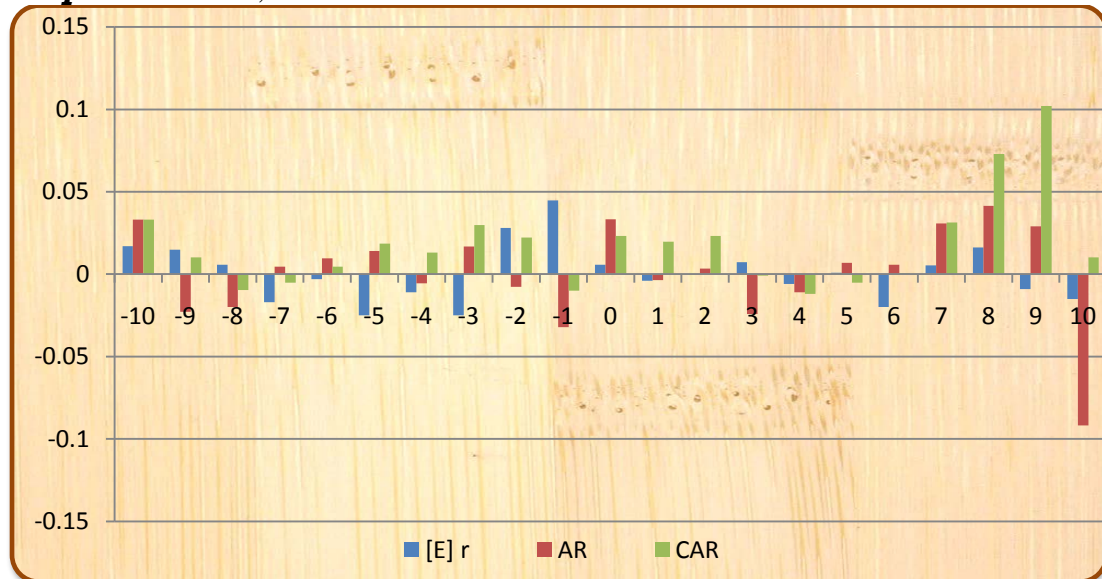
Graph 6.32 ER, AR and CAR of Tata Powers Limited

33. TATA STEEL LIMITED: In case of Tata Steel Limited, the changes in abnormal return on share prices are statistically significant on 1st day prior to and on 7th 8th and 9th day after acquisition announcement and also on the event day. The returns are negative before event date and are positive on and after the event. It indicates that the event announcement has created positive impact on the share price of the company. The highest value of CAR is 10.20% and the lowest value is -1.2%.

Table 6.35 [E]r, AR and CAR values of Tata Steel Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0170	0.0332	0.0332	0.7465
-9	0.0149	-0.0229	0.0102	-1.2082
-8	0.0058	-0.0200	-0.0097	-1.0533
-7	-0.0170	0.0045	-0.0052	0.2414
-6	-0.0030	0.0097	0.0045	0.5131
-5	-0.0250	0.0140	0.0186	0.7402
-4	-0.0110	-0.0055	0.0131	-0.2895
-3	-0.0250	0.0167	0.0299	0.8818
-2	0.0281	-0.0076	0.0222	-0.4036
-1	0.0448	-0.0322	-0.0100	-1.6965*
0	0.0058	0.0333	0.0233	1.7541**
1	-0.0040	-0.0035	0.0197	-0.1852
2	-0.0002	0.0034	0.0232	0.1813
3	0.0072	-0.0242	-0.0009	-1.2736
4	-0.0060	-0.0110	-0.0120	-0.5798
5	0.0008	0.0068	-0.0051	0.3625
6	-0.0200	0.0057	0.0006	0.3004
7	0.0054	0.0308	0.0314	1.6238*
8	0.0163	0.0414	0.0729	2.1794**
9	-0.0090	0.0291	0.1020	1.5334*
10	-0.0150	-0.0918	0.0102	-0.8288

Note: * Significant at 10% level, ** Significant at 5% level

Graph 6.33 ER, AR and CAR of Tata Steel Limited

34. UNITED CREDIT LIMITED: For United Credit Limited, the abnormal returns on share prices are positive and statistically significant only on event day for all surrounding days in entire window. The returns do not show any reaction of market on acquisition announcement. The value of CAR is negative from 3rd day to 10th day prior to event day. This happened mainly because of positive and statistically significant abnormal return on the event day. It is observed from the table 6.36 that the value of abnormal return is highest (5.08%) on the announcement of acquisition.

35. VIDEOCON INDUSTRIES LIMITED: For Videocon Industries Limited, the abnormal return on share prices are statistically significant and negative only on 7th day before the acquisition announcement and it is significant and positive on 8th and 9th day after acquisition announcement. Therefore, it can be noted here that acquisition announcement has positively affected share price of the company. The CAR values are negative on majority days of the event window *i.e.* on all the days in pre event period, on the event day and up to 7th day in post event period. The CARs are positive on 8th (8.53%), 9th (17.85%) and 10th (16.88%) day after the acquisition announcement. The CAR values are positive because of positive and highest abnormal return on the 8th day (15.10%) after the event day.

Table 6.36 [E]r, AR and CAR values of United Credit Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0040	-0.2383	-0.2383	-1.1235
-9	-0.0070	-0.0411	-0.2795	-0.8854
-8	0.0034	0.0449	-0.2345	0.9662
-7	0.0005	0.0476	-0.1869	1.0232
-6	0.0079	0.0417	-0.1451	0.8983
-5	0.0044	0.0447	-0.1004	0.9624
-4	0.0084	0.0402	-0.0601	0.8648
-3	0.0110	0.0387	-0.0214	0.8323
-2	0.0026	0.0463	0.0248	0.9956
-1	-0.0004	0.0500	0.0748	1.0750
0	-0.0020	0.0508	0.1256	1.9026**
1	0.0051	0.0003	0.1260	0.0069
2	0.0051	0.0357	0.1617	0.7674
3	-0.0100	0.0311	0.1928	0.6699
4	0.0069	0.0429	0.2358	0.9240
5	0.0067	0.0432	0.2791	0.9300
6	0.0046	0.0453	0.3244	0.9739
7	0.0101	0.0396	0.3640	0.8514
8	0.0033	0.0398	0.4038	0.8567
9	0.0029	-0.0523	0.3515	-1.1256
10	0.0016	-0.0514	0.3001	-1.1061

Note: ** Significant at 5% level

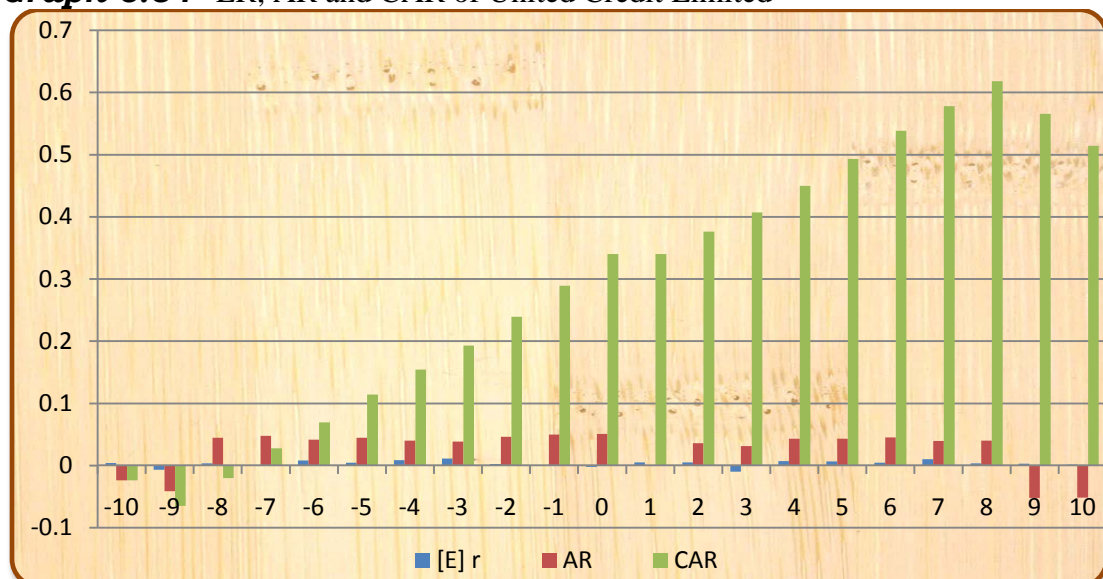
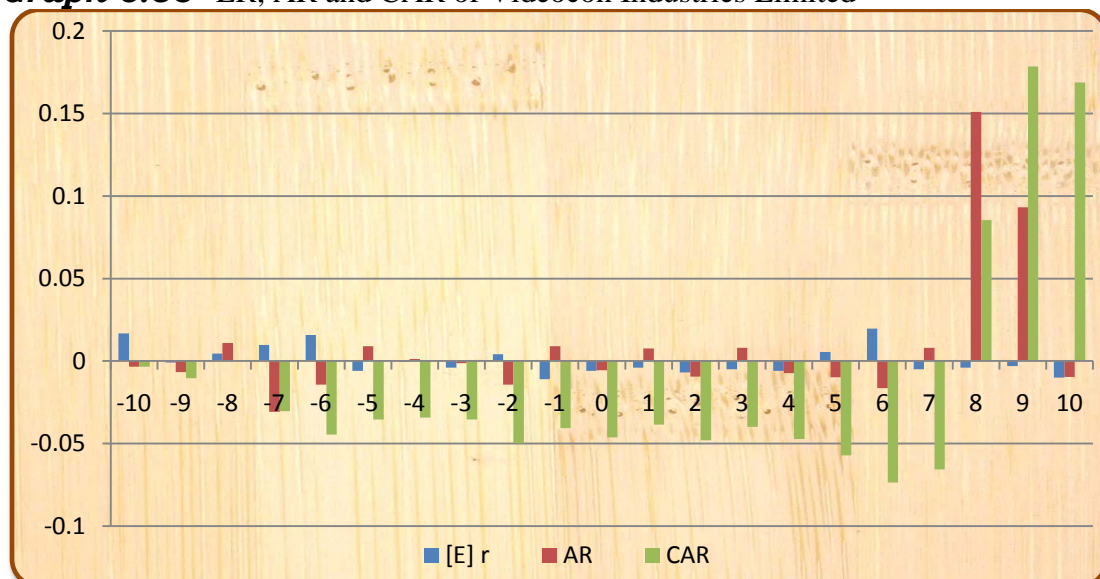
Graph 6.34 ER, AR and CAR of United Credit Limited

Table 6.37 [E]r, AR and CAR values of Videocon Industries Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0168	-0.0035	-0.0035	-0.2065
-9	-0.0010	-0.0068	-0.0104	-0.3960
-8	0.0046	0.0109	0.0004	0.6301
-7	0.0098	-0.0308	-0.0303	-1.7711**
-6	0.0157	-0.0142	-0.0445	-0.8178
-5	-0.0060	0.0089	-0.0355	0.5158
-4	-0.0005	0.0013	-0.0342	0.0772
-3	-0.0040	-0.0012	-0.0355	-0.0727
-2	0.0041	-0.0142	-0.0497	-0.8211
-1	-0.0110	0.0090	-0.0407	0.5172
0	-0.0060	-0.0056	-0.0463	-0.3223
1	-0.0040	0.0077	-0.0386	0.4463
2	-0.0070	-0.0094	-0.0480	-0.5402
3	-0.0050	0.0081	-0.0399	0.4670
4	-0.0060	-0.0074	-0.0473	-0.4293
5	0.0055	-0.0098	-0.0571	-0.5632
6	0.0197	-0.0165	-0.0737	-0.9538
7	-0.0050	0.0081	-0.0656	0.4667
8	-0.0040	0.1510	0.0853	8.6828***
9	-0.0030	0.0932	0.1785	5.3591***
10	-0.0100	-0.0097	0.1688	-0.5579

Note: ** Significant at 5% level, *** Significant at 1% Level

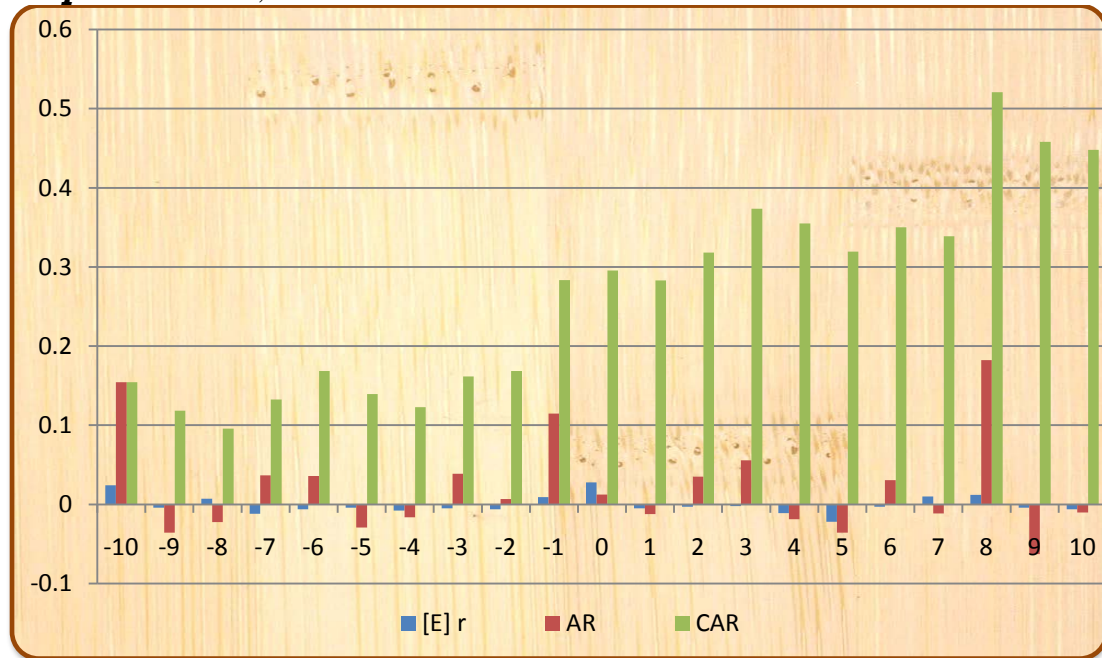
Graph 6.35 ER, AR and CAR of Videocon Industries Limited

36. ACI INFOCOM LIMITED: The abnormal returns on share prices are statistically significant and positive on 1st 3rd 6th and 7th day prior to the acquisition announcement. The returns are statistically significant on 2nd 3rd 5th 8th and 9th day after acquisition announcement. The CARs are positive on all the day of the event window. The highest value of CAR is 52.09% on 8th day after the event day and the lowest value of CAR is 9.58% on the 8th day prior to acquisition announcement by the ACI Infocom Limited.

Table 6.38 [E]r, AR and CAR values of ACI Infocom Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0242	0.1542	0.1542	1.1184
-9	-0.0040	-0.0359	0.1182	-1.1270
-8	0.0072	-0.0224	0.0958	-0.8905
-7	-0.0120	0.0365	0.1324	1.4512*
-6	-0.0060	0.0360	0.1684	1.4277*
-5	-0.0040	-0.0291	0.1392	-1.1564
-4	-0.0080	-0.0163	0.1229	-0.6469
-3	-0.0050	0.0389	0.1618	1.5431*
-2	-0.0060	0.0067	0.1686	0.2669
-1	0.0091	0.1147	0.2833	4.5489***
0	0.0278	0.0123	0.2956	0.4889
1	-0.0050	-0.0124	0.2831	-0.4942
2	-0.0030	0.0350	0.3181	1.3880*
3	-0.0020	0.0555	0.3736	2.2012**
4	-0.0110	-0.0187	0.3549	-0.7415
5	-0.0220	-0.0356	0.3193	-1.4144*
6	-0.0030	0.0307	0.3500	1.2187
7	0.0101	-0.0113	0.3387	-0.4481
8	0.0121	0.1821	0.5209	7.2251***
9	-0.0040	-0.0627	0.4581	-2.4890**
10	-0.0060	-0.0101	0.4480	-0.4008

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

Graph 6.36 ER, AR and CAR of ACI Infocom Limited

37. AIA ENGINEERING LIMITED: In case of AIA Engineering Limited, the abnormal returns on share prices of the company are statistically insignificant on all the days surrounding event indicating no effect of acquisition announcement on the share price. The CAR values are positive on all the days of the event window except on 1st (-1.70%) day prior to acquisition announcement and on 8th (-1.39%) 9th (-4.11%) and 10th (-7.04%) day after the event day.

38. ALLSEC TECHNOLOGIES LIMITED: In case of Allsec Technologies Limited, the abnormal returns on share prices are statistically significant and positive on 4th day prior to acquisition announcement and on 5th and 6th day after acquisition announcement. These indicate positive effect of acquisition announcement on share price of the company. The positive CAR is observed after 5th in post event period. For the days before that the CARs are negative.

Table 6.39 [E]r, AR and CAR values of AIA Engineering Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0182	0.0765	0.0765	0.5910
-9	-0.0010	-0.0271	0.0494	-0.5642
-8	0.0053	-0.0216	0.0277	-0.4495
-7	0.0061	0.0100	0.0378	0.2088
-6	-0.0030	0.0147	0.0525	0.3056
-5	-0.0090	0.0223	0.0749	0.4641
-4	-0.0040	-0.0475	0.0274	-0.9867
-3	0.0122	-0.0049	0.0224	-0.1030
-2	-0.0100	-0.0159	0.0065	-0.3309
-1	0.0101	-0.0235	-0.0170	-0.4892
0	-0.0090	0.0539	0.0360	1.1201
1	0.0078	-0.0127	0.0241	-0.2652
2	-0.0100	0.0298	0.0540	0.6209
3	-0.0100	0.0020	0.0560	0.0422
4	-0.0070	-0.0001	0.0558	-0.0029
5	-0.0160	-0.0092	0.0466	-0.1923
6	-0.0200	0.0011	0.0478	0.0245
7	0.0002	-0.0217	0.0261	-0.4511
8	-0.0100	-0.0400	-0.0139	-0.8322
9	0.0045	-0.0271	-0.0411	-0.5648
10	0.0107	-0.0292	-0.0704	-0.6081

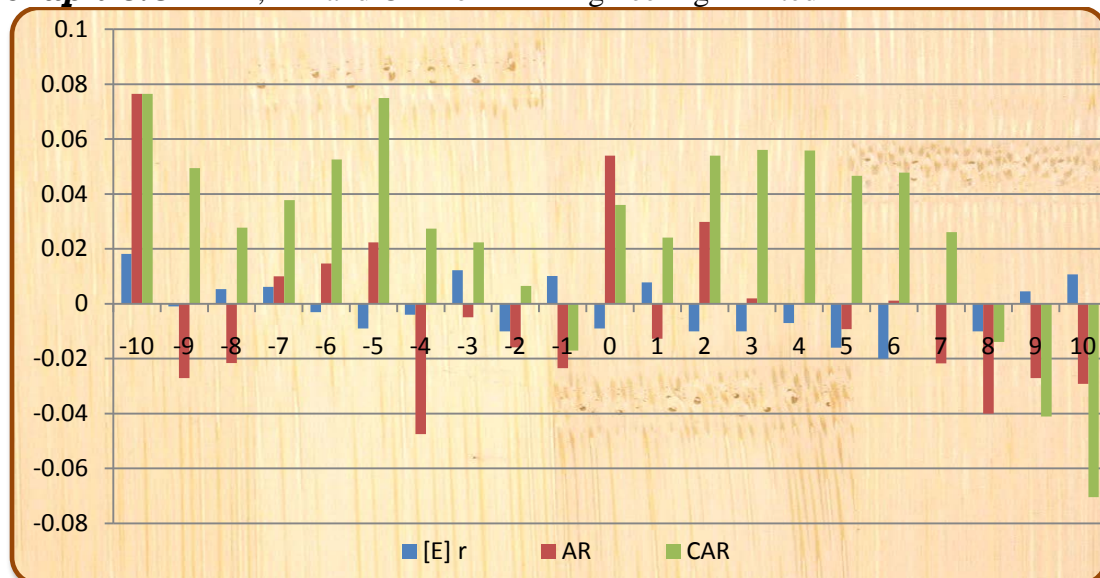
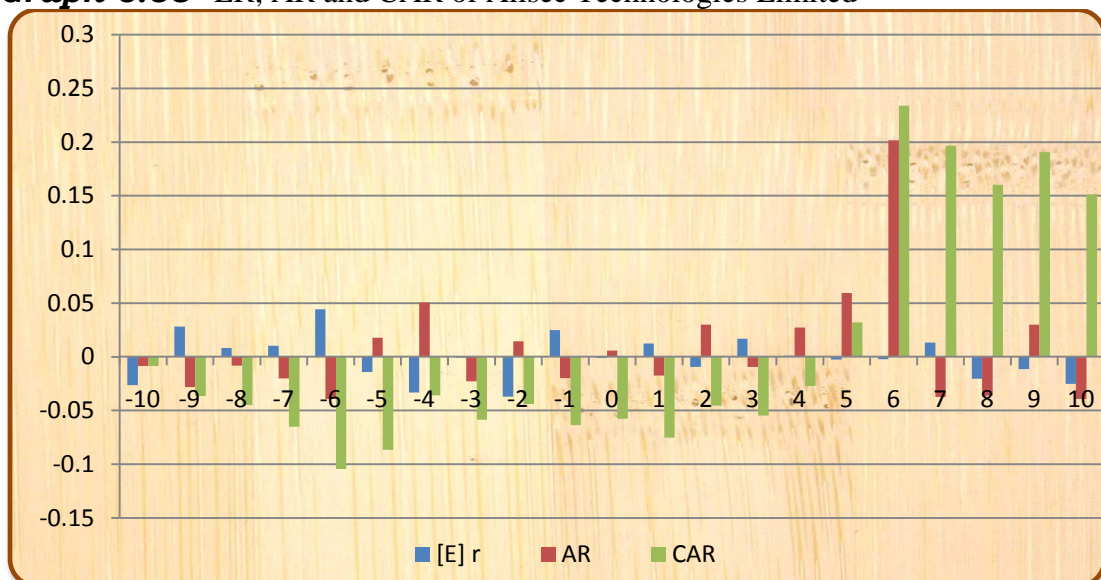
Graph 6.37 ER, AR and CAR of AIA Engineering Limited

Table 6.40 [E]r, AR and CAR values of Allsec Technologies Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0264	-0.0085	-0.0085	-0.2415
-9	0.0281	-0.0281	-0.0366	-0.8005
-8	0.0081	-0.0081	-0.0447	-0.2305
-7	0.0102	-0.0202	-0.0650	-0.5762
-6	0.0443	-0.0392	-0.1043	-1.1163
-5	-0.0141	0.0178	-0.0864	0.5082
-4	-0.0331	0.0506	-0.0358	1.4391*
-3	-0.0006	-0.0227	-0.0585	-0.6462
-2	-0.0371	0.0144	-0.0440	0.4118
-1	0.0248	-0.0197	-0.0637	-0.5600
0	-0.0009	0.0060	-0.0576	0.1731
1	0.0124	-0.0175	-0.0752	-0.4986
2	-0.0094	0.0299	-0.0453	0.8502
3	0.0168	-0.0093	-0.0546	-0.2648
4	0.0012	0.0273	-0.0272	0.7783
5	-0.0025	0.0595	0.0322	1.6913*
6	-0.0021	0.2017	0.2339	5.7330***
7	0.0134	-0.0373	0.1966	-1.0611
8	-0.0205	-0.0362	0.1603	-1.0306
9	-0.0114	0.0301	0.1905	0.8560
10	-0.0252	-0.0390	0.1514	-1.1087

Note: * Significant at 10% level, *** Significant at 1% Level

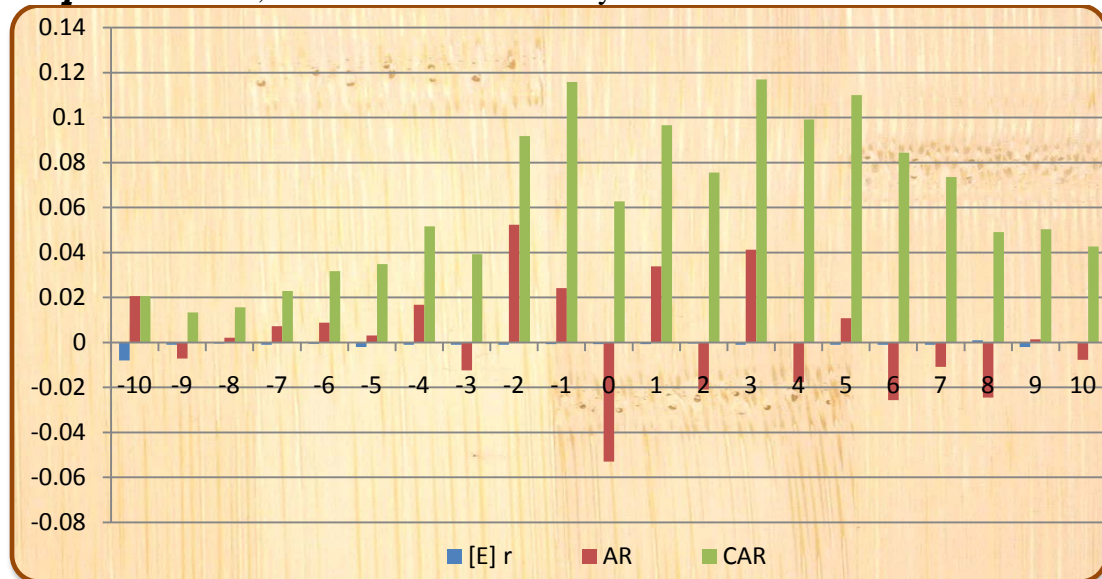
Graph 6.38 ER, AR and CAR of Allsec Technologies Limited

39. DR REDDY'S LABORATORIES LIMITED: For Dr Reddy's Laboratories Limited, the abnormal returns on share prices are statistically significant and positive on 1st and 2nd before the acquisition. The abnormal returns are statistically significant on 1st 3rd 6th and 8th day after acquisition announcement including event day. The CAR values are positive for all the days in event window. The highest value of CAR is 11.58% on the 1st day prior to acquisition announcement and the lowest value is 1.34% on the 9th day prior to the event day.

Table 6.41 [E]r, AR and CAR values of Dr Reddy's Laboratories Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0080	0.0206	0.0206	1.1524
-9	-0.0010	-0.0071	0.0134	-0.4004
-8	-0.0005	0.0021	0.0156	0.1203
-7	-0.0010	0.0072	0.0229	0.4058
-6	-0.0006	0.0088	0.0317	0.4947
-5	-0.0020	0.0031	0.0349	0.1781
-4	-0.0010	0.0167	0.0517	0.9350
-3	-0.0010	-0.0124	0.0392	-0.6946
-2	-0.0010	0.0524	0.0917	2.9252***
-1	-0.0007	0.0241	0.1158	1.3453*
0	-0.0007	-0.0529	0.0628	-2.9544***
1	-0.0008	0.0338	0.0966	1.8860**
2	-0.0005	-0.0209	0.0756	-1.1712
3	-0.0010	0.0413	0.1169	2.3045**
4	-0.0002	-0.0177	0.0991	-0.9920
5	-0.0010	0.0108	0.1100	0.6052
6	-0.0010	-0.0256	0.0844	-1.4304*
7	-0.0010	-0.0108	0.0735	-0.6067
8	0.0009	-0.0245	0.0490	-1.3679*
9	-0.0020	0.0014	0.0504	0.0819
10	0.0004	-0.0077	0.0427	-0.4315

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

Graph 6.39 ER, AR and CAR of Dr Reddy's Laboratories Limited

40. GENUS POWER INFRASTRUCTURES LIMITED: The abnormal return on share prices of Genus Power Infrastructures Limited are statistically significant and negative on 1st day prior to acquisition announcement on the event day and on 3rd day after acquisition announcement and the returns are positively significant on 5th 6th and 7th day after the event. The CARs are negative on all the days in event window except on 9th (1.75%) and 10th (1.23%) day prior to acquisition announcement.

41. JAYASWAL NACO INDUSTRIES LIMITED: The abnormal returns on share prices are statistically significant and positive on 8th and 9th day prior to acquisition announcement and on 8th day after acquisition announcement and it are significant but negative on 7th day prior to acquisition date and 5th day after the acquisition date, thus the response to share price is not consistent. The CAR values are negative on majority of the days of the event window. The highest value of CAR is 3.72% on the 5th day prior to event day and the lowest value is -15.17% on the 8th day after the event.

Table 6.42 [E]r, AR and CAR values of Genus Power Infrastructures Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0310	0.0123	0.0123	0.3552
-9	-0.0560	0.0051	0.0175	0.1489
-8	-0.0200	-0.0261	-0.0086	-0.7515
-7	0.0181	-0.0277	-0.0363	-0.7966
-6	-0.0360	-0.0430	-0.0793	-1.2391
-5	-0.0002	-0.0305	-0.1098	-0.8778
-4	0.0183	0.0069	-0.1029	0.1996
-3	0.0040	0.0077	-0.0951	0.2233
-2	-0.0520	-0.0172	-0.1124	-0.4959
-1	0.0344	-0.0887	-0.2011	-2.5523***
0	-0.0670	-0.0574	-0.2585	-2.6821***
1	0.0055	0.0081	-0.2504	0.2338
2	0.0164	-0.0072	-0.2576	-0.2077
3	0.0266	-0.1060	-0.3637	-3.0510***
4	0.0747	-0.0244	-0.3882	-0.7036
5	-0.0060	0.0889	-0.2992	2.5594***
6	-0.0020	0.0824	-0.2168	2.3712***
7	0.0297	0.0896	-0.1271	2.5779***
8	-0.0480	0.0029	-0.1242	0.0853
9	0.0023	-0.0183	-0.1425	-0.5281
10	0.0129	-0.0424	-0.1850	-1.2217

Note: *** Significant at 1% Level

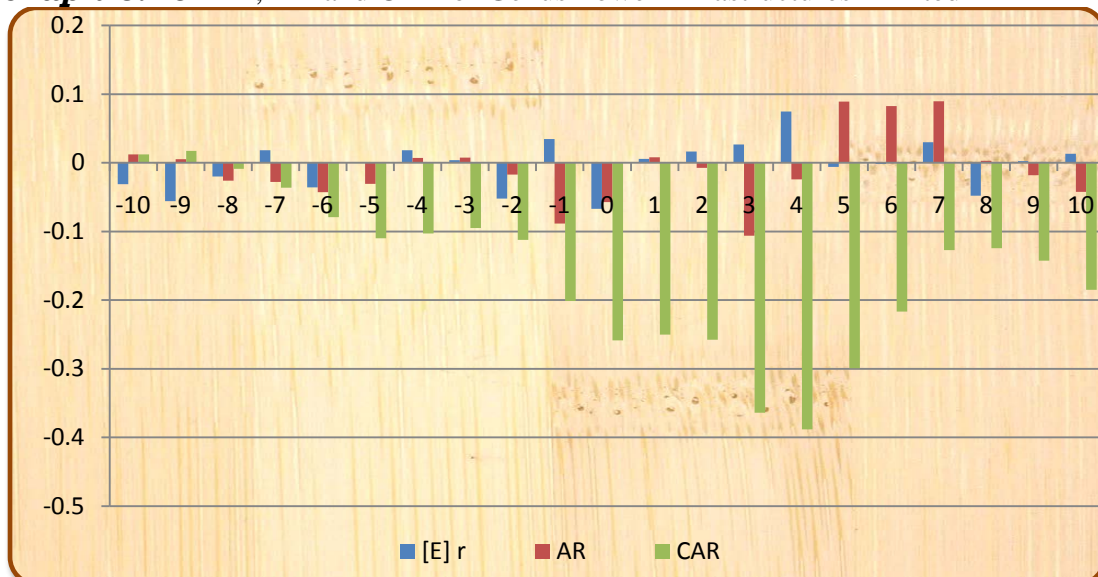
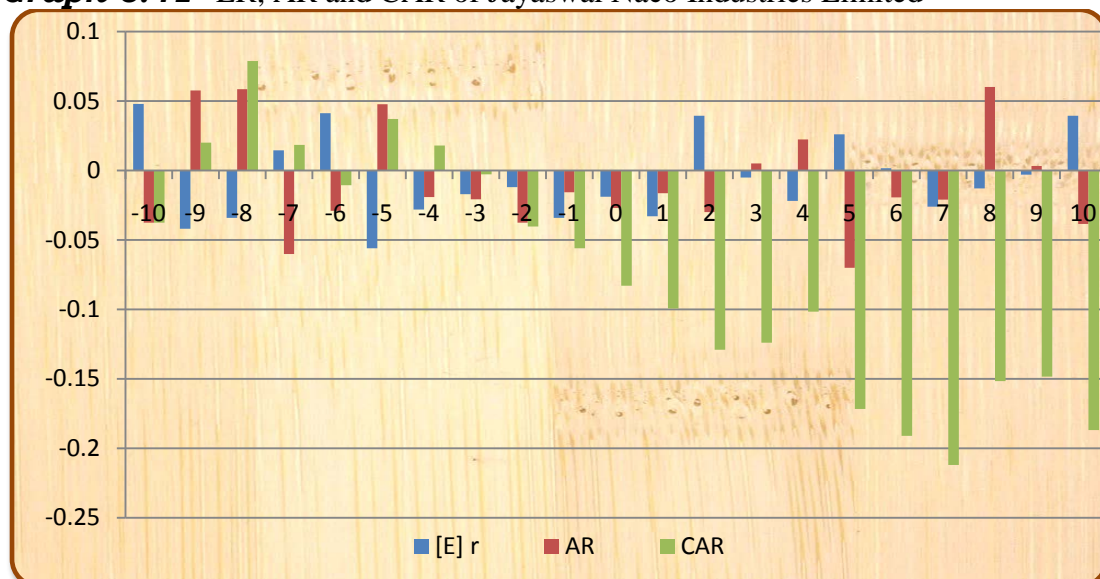
Graph 6.40 ER, AR and CAR of Genus Power Infrastructures Limited

Table 6.43 [E]r, AR and CAR values of Jayaswal Naco Industries Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0479	-0.0375	-0.0375	-0.5732
-9	-0.0420	0.0576	0.0201	1.4972*
-8	-0.0340	0.0586	0.0787	1.5222*
-7	0.0146	-0.0602	0.0185	-1.5652*
-6	0.0413	-0.0291	-0.0106	-0.7579
-5	-0.0560	0.0478	0.0372	1.2426
-4	-0.0280	-0.0192	0.018	-0.4992
-3	-0.0170	-0.0207	-0.0027	-0.5395
-2	-0.0120	-0.0376	-0.0403	-0.9775
-1	-0.0340	-0.0156	-0.0559	-0.4060
0	-0.0190	-0.0270	-0.0829	-0.7017
1	-0.0330	-0.0163	-0.0992	-0.4250
2	0.0394	-0.0299	-0.1291	-0.7765
3	-0.0050	0.0051	-0.124	0.1331
4	-0.0220	0.0224	-0.1016	0.5840
5	0.0261	-0.0701	-0.1717	-1.8216**
6	0.0017	-0.0193	-0.191	-0.5035
7	-0.0260	-0.0209	-0.2119	-0.5431
8	-0.0130	0.0602	-0.1517	1.5639*
9	-0.0030	0.0033	-0.1484	0.0860
10	0.0395	-0.0385	-0.1869	-1.0007

Note: * Significant at 10% level, ** Significant at 5% level

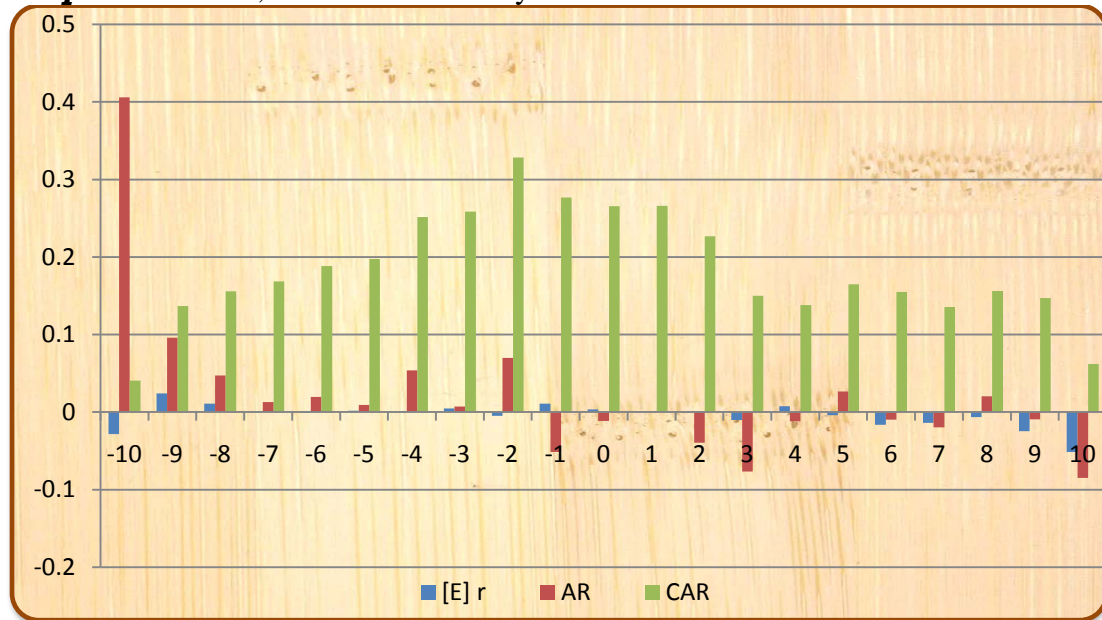
Graph 6.41 ER, AR and CAR of Jayaswal Naco Industries Limited

42. JAYSHREE TEA INDUSTRIES LIMITED: The abnormal returns on share prices of Jayshree Tea Industries Limited are statistically significant and positive on 2nd 4th 8th and 10th day prior to acquisition announcement. The abnormal returns are statistically significant and negative on 2nd 3rd and 10th day after acquisition announcement. The abnormal returns are negative on the days after the event day, indicates negative impact of acquisition announcement on share prices of the company. The CAR values are positive and continuously increasing in pre event period up to 2nd day prior the event. After that the values show decreasing trend. This supports the observation made in abnormal returns that the acquisition announcement has negatively affected the share price of the acquirer company.

Table 6.44 [E]r, AR and CAR values of Jayshree Tea Industries Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0280	0.4059	0.0405	3.7696***
-9	0.0239	0.0960	0.1365	0.1036
-8	0.0109	0.0470	0.1558	1.6763*
-7	0.0008	0.0127	0.1686	0.4549
-6	-0.0010	0.0197	0.1884	0.7040
-5	0.0020	0.0091	0.1976	0.3268
-4	-0.0003	0.0537	0.2514	1.9150***
-3	0.0048	0.0072	0.2586	0.2564
-2	-0.0050	0.0698	0.3284	2.4866***
-1	0.0107	-0.0515	0.2769	-1.1363
0	0.0034	-0.0114	0.2654	-0.4078
1	0.0013	0.0005	0.2659	0.0194
2	-0.0009	-0.0393	0.2266	-1.3990*
3	-0.0100	-0.0763	0.1500	-2.7280***
4	0.0074	-0.0118	0.1382	-0.4219
5	-0.0040	0.0266	0.1648	0.9492
6	-0.0160	-0.0097	0.1551	-0.3462
7	-0.0140	-0.0194	0.1357	-0.6920
8	-0.0060	0.0204	0.1561	0.7262
9	-0.0250	-0.0091	0.1469	-0.3271
10	-0.0510	-0.0847	0.0621	-3.0182***

Note: * Significant at 10% level, *** Significant at 1% Level

Graph 6.42 ER, AR and CAR of Jayshree Tea Industries Limited

43. MAHINDRA & MAHINDRA LIMITED: The abnormal returns on share prices of Mahindra & Mahindra Limited are statistically significant and negative on 2nd 6th 7th and 10th day prior to acquisition announcement and on 2nd 3rd and 7th day after acquisition announcement. It is very important to note here that the abnormal returns are negative on all the days surrounding the event window. This shows that market has reacted very negatively to the event of acquisition. The CAR values are negative on all the days of the event window except on 8th (1.57%) and 9th (0.02%) day before the acquisition announcement. This indicates the same observation as abnormal return, that the acquisition announcement has negatively affected the share price of the acquirer company.

44. ORIENT PAPER INDUSTRIES LIMITED: In case of Orient Paper Limited, the abnormal returns on share prices of the company are statistically insignificant on all the days surrounding event. It indicates that acquisition announcement has not affected the share price of the company during entire event window. The CARs are positive on majority of the day in the event window except on 3rd day (-0.24%) prior to acquisition announcement, on the 1st day (-0.11%) and on the 2nd day (-0.84%) after the event day. The highest CAR is observed on 6th day (6.95%) prior to event day. This indicates narrow range of CAR values across the entire event window.

Table 6.45 [E]r, AR and CAR values of Mahindra & Mahindra Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0080	-0.0222	-0.0222	-1.3542**
-9	-0.0100	0.0224	0.0002	1.3064
-8	-0.0003	0.0155	0.0157	0.9453
-7	-0.0150	-0.0242	-0.0085	-1.4810*
-6	-0.0120	-0.0234	-0.0320	-1.4296*
-5	-0.0140	-0.0069	-0.0390	-0.4258
-4	-0.0040	0.0078	-0.0311	0.4787
-3	0.0111	0.0018	-0.0292	0.1150
-2	-0.0100	-0.0719	-0.1012	-4.3883***
-1	0.0040	-0.0137	-0.1150	-0.8381
0	-0.0170	-0.0071	-0.1221	-0.4380
1	-0.0050	0.0184	-0.1037	1.1244
2	-0.0220	-0.0267	-0.1304	-1.6292*
3	0.0119	-0.0302	-0.1606	-1.8412**
4	-0.0100	0.0241	-0.1365	1.1728
5	-0.0250	-0.0170	-0.1535	-1.0410
6	-0.0100	0.0014	-0.1521	0.0880
7	0.0146	-0.0288	-0.1809	-1.7571**
8	0.0027	0.0008	-0.1801	0.0487
9	-0.0040	0.0210	-0.1590	1.2852
10	0.0098	-0.0087	-0.1677	-0.5305

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

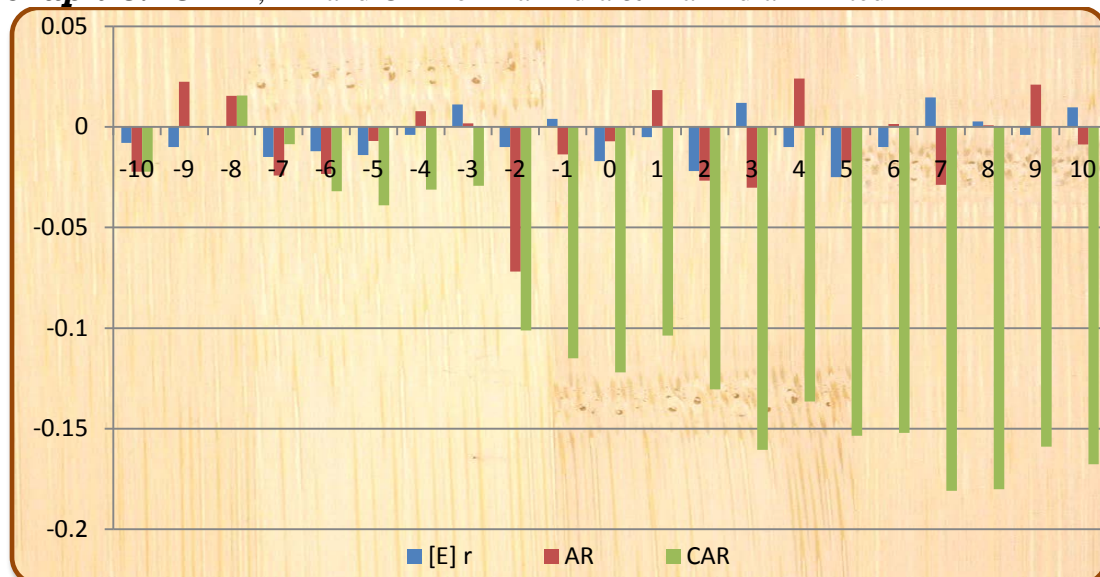
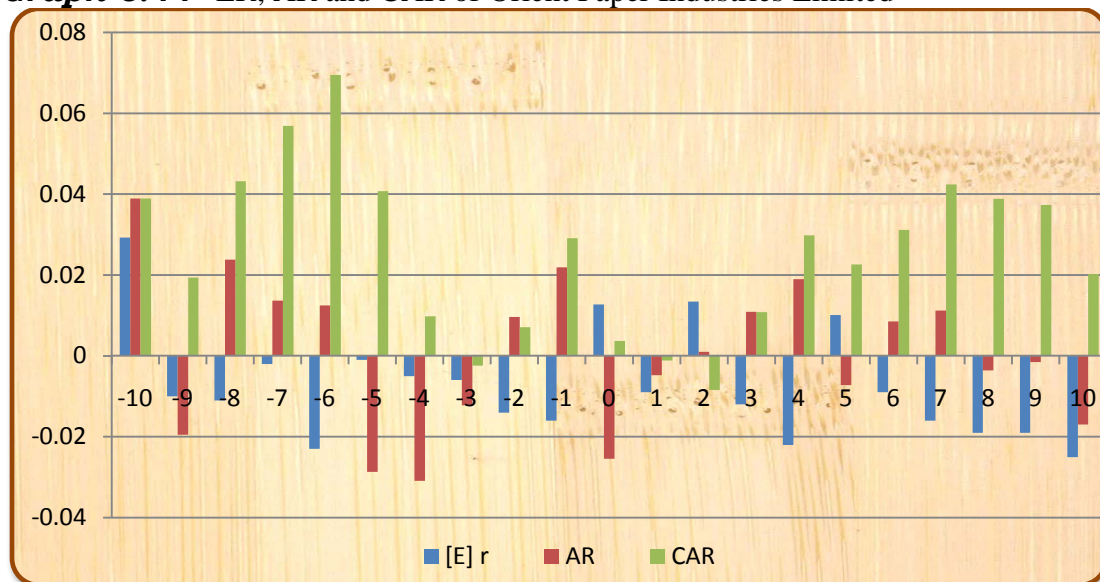
Graph 6.43 ER, AR and CAR of Mahindra & Mahindra Limited

Table 6.46 [E]r, AR and CAR values of Orient Paper Industries Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.0293	0.0389	0.0389	0.5248
-9	-0.0100	-0.0195	0.0194	-0.2633
-8	-0.0110	0.0238	0.0432	0.3216
-7	-0.0020	0.0137	0.0569	0.1847
-6	-0.0230	0.0125	0.0695	0.1694
-5	-0.0010	-0.0287	0.0407	-0.3880
-4	-0.0050	-0.0309	0.0098	-0.4170
-3	-0.0060	-0.0122	-0.0024	-0.1649
-2	-0.0140	0.0096	0.0071	0.1294
-1	-0.0160	0.0219	0.0291	0.2960
0	0.0127	-0.0254	0.0037	-0.3425
1	-0.0090	-0.0048	-0.0011	-0.0657
2	0.0134	0.0010	-0.0084	0.0145
3	-0.0120	0.0109	0.0108	0.1471
4	-0.0220	0.0190	0.0298	0.2568
5	0.0101	-0.0072	0.0226	-0.0973
6	-0.0090	0.0085	0.0312	0.1153
7	-0.0160	0.0112	0.0424	0.1516
8	-0.0190	-0.0036	0.0388	-0.0491
9	-0.0190	-0.0015	0.0373	-0.0203
10	-0.0250	-0.0170	0.0202	-0.2303

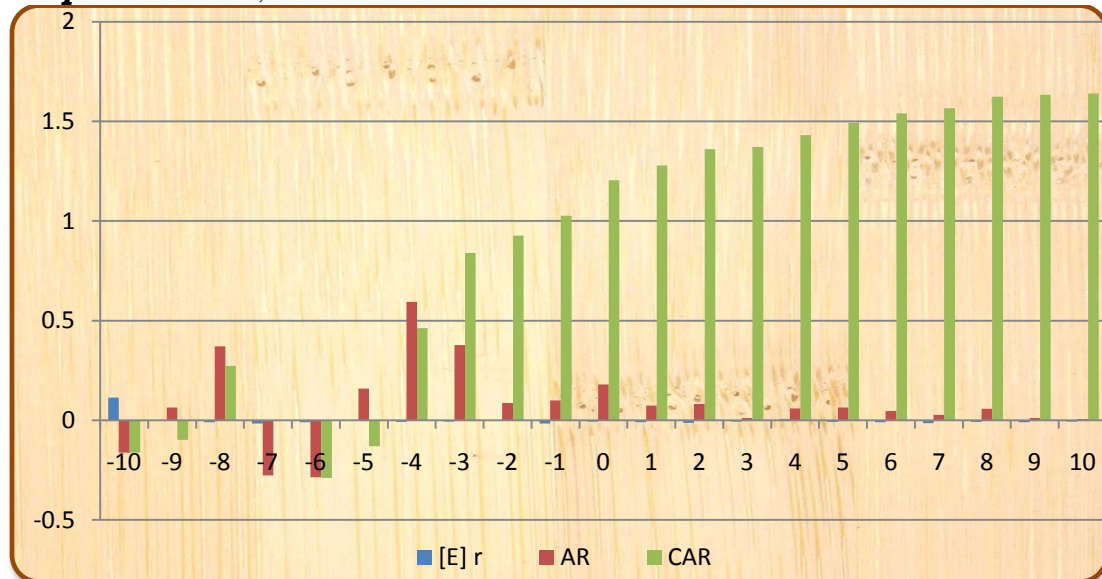
Graph 6.44 ER, AR and CAR of Orient Paper Industries Limited

45. PANAMA PETROCHEM LIMITED: The abnormal returns on share prices of Panama Petrochem Limited are statistically significant surprisingly on all the days prior to acquisition announcement, on the event day and on 1st and 2nd day after acquisition announcement. The abnormal returns are positive all most on all days except on 6th 7th and 10th day prior to event. This indicates that acquisition announcement has positive impact on share price of the company. The CARs are negative up to 5th day prior to event day and CARs are consistently positive for all the days after 5th day. This is mainly because of high abnormal return (59.41%) on the 4th day prior to acquisition announcement, which has affected the CAR values.

Table 6.47 [E]r, AR and CAR values of Panama Petrochem Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.1144	-0.1629	-0.1629	-3.4027***
-9	-0.0005	0.0642	-0.0987	1.3418*
-8	-0.0100	0.3715	0.2728	7.7573***
-7	-0.0160	-0.2763	-0.0035	-5.7701***
-6	-0.0100	-0.2862	-0.2897	-5.9761***
-5	-0.0030	0.1587	-0.1310	3.3135***
-4	-0.0080	0.5941	0.4630	3.4040***
-3	-0.0060	0.3770	0.8401	7.8721***
-2	-0.0040	0.0866	0.9268	1.8098**
-1	-0.0170	0.0992	1.0261	2.0725**
0	-0.0060	0.1793	1.2054	3.7433***
1	-0.0100	0.0738	1.2792	1.5409*
2	-0.0130	0.0816	1.3608	1.7039*
3	-0.0060	0.0111	1.3720	0.2331
4	0.0060	0.0590	1.4310	1.2332
5	-0.0080	0.0632	1.4942	1.3198
6	-0.0100	0.0455	1.5398	0.9516
7	-0.0150	0.0265	1.5664	0.5549
8	-0.0090	0.0573	1.6238	1.1973
9	-0.0100	0.0106	1.6344	0.2227
10	-0.0060	0.0063	1.6408	0.1322

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

Graph 6.45 ER, AR and CAR of Panama Petrochem Limited

46. PIRAMAL ENTERPRISES LIMITED: The abnormal returns on share prices are statistically significant and positive on 8th day prior to acquisition announcement and on event day showing positive impact of acquisition announcement. The CARs are positive on all the day of the event window indicating positive effect of acquisition on the share price of the acquirer firm. The highest value of CAR is 12.70% on the 7th day after the acquisition announcement and the lowest values is 1.26% on the 10th day of pre event period.

47. SRF LIMITED: In case of SRF Limited, the abnormal returns on share prices are statistically significant and positive on 7th day prior to acquisition announcement and significant but negative 6th day prior to event and on 4th and 7th day after acquisition announcement. This shows that market has reacted negatively for the event. The values of CAR show uneven trend for SRF Limited. The highest value of CAR is 6.56% on the 3rd day after the acquisition announcement and the lowest value of CAR is -13.91% on the 9th day after the event.

Table 6.48 [E]r, AR and CAR values of Piramal Enterprises Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0040	0.0126	0.0126	0.4435
-9	-0.0008	0.0232	0.0358	0.8151
-8	0.0043	0.0390	0.0748	1.3707*
-7	0.0028	0.0063	0.0812	0.2214
-6	-0.0180	0.0005	0.0817	0.0179
-5	0.0152	0.0130	0.0947	0.4585
-4	-0.0060	0.0016	0.0964	0.0594
-3	0.0072	-0.0433	0.0531	-0.5211
-2	-0.0040	0.0032	0.0563	0.1142
-1	0.0039	-0.0311	0.0252	-1.0919
0	0.0123	0.0281	0.0534	1.9895**
1	0.0030	0.0252	0.0787	0.8856
2	0.0081	0.0076	0.0863	0.2690
3	0.0087	0.0263	0.1127	0.9266
4	0.0014	-0.0197	0.0930	-0.6918
5	-0.0030	-0.0262	0.0668	-0.9209
6	0.0006	0.0287	0.0955	1.0097
7	0.0136	0.0314	0.1270	1.1046
8	-0.0040	-0.0232	0.1037	-0.8166
9	0.0119	-0.0106	0.0931	-0.3732
10	-0.0030	0.0065	0.0997	0.2312

Note: * Significant at 10% level, ** Significant at 5% level

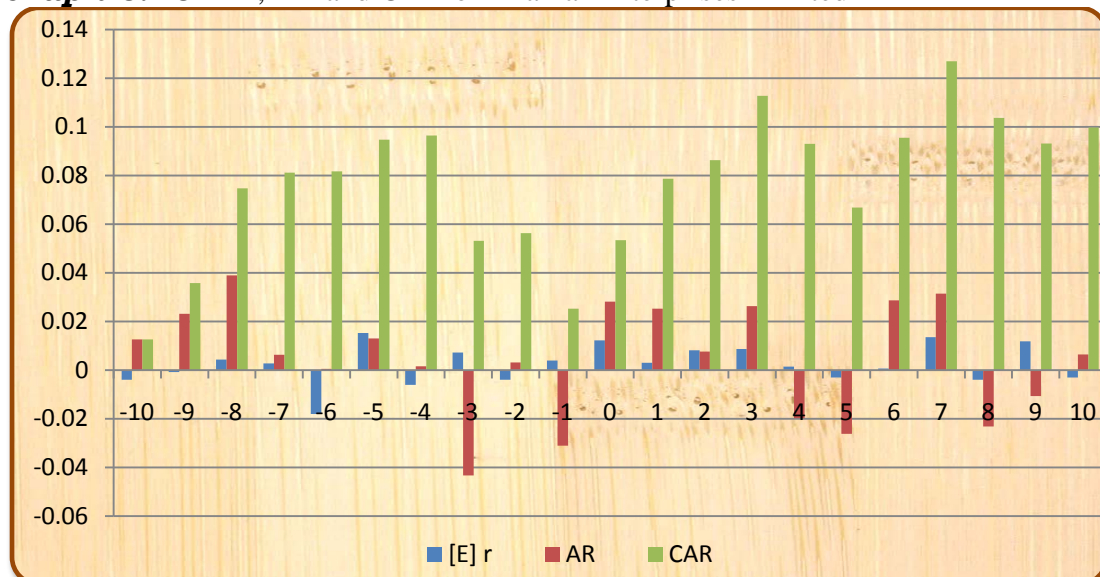
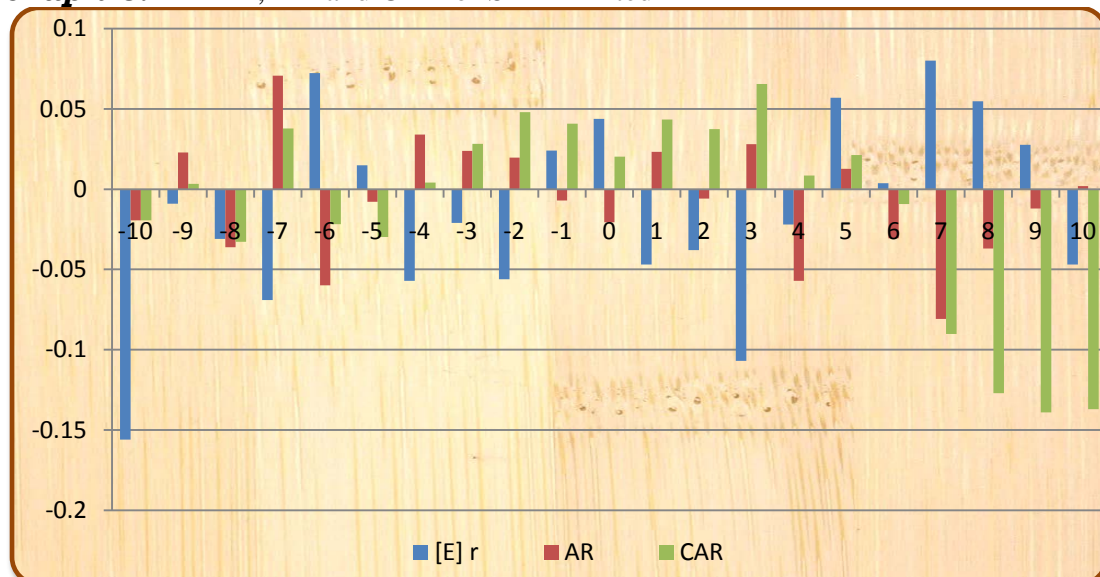
Graph 6.46 ER, AR and CAR of Piramal Enterprises Limited

Table 6.49 [E]r, AR and CAR values of SRF Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.1560	-0.0195	-0.0195	-0.6453
-9	-0.0090	0.0228	0.0033	0.7557
-8	-0.0310	-0.0361	-0.0327	-1.1958
-7	-0.0690	0.0707	0.0379	2.3424**
-6	0.0723	-0.0598	-0.0218	-1.9801**
-5	0.0149	-0.0079	-0.0297	-0.2626
-4	-0.0570	0.0340	0.0042	1.1277
-3	-0.0210	0.0239	0.0282	0.7936
-2	-0.0560	0.0197	0.0479	0.6521
-1	0.0241	-0.0071	0.0407	-0.2381
0	0.0438	-0.0205	0.0202	-0.6798
1	-0.0470	0.0232	0.0434	0.7696
2	-0.0380	-0.0059	0.0375	-0.1984
3	-0.1070	0.0281	0.0656	0.9328
4	-0.0220	-0.0571	0.0085	-1.8909**
5	0.0570	0.0127	0.0212	0.4212
6	0.0038	-0.0306	-0.0093	-1.0145
7	0.0801	-0.0807	-0.0901	-2.6733***
8	0.0547	-0.0369	-0.1270	-1.2219
9	0.0276	-0.0120	-0.1391	-0.3990
10	-0.0470	0.0019	-0.1371	0.0636

Note: ** Significant at 5% level, *** Significant at 1% Level

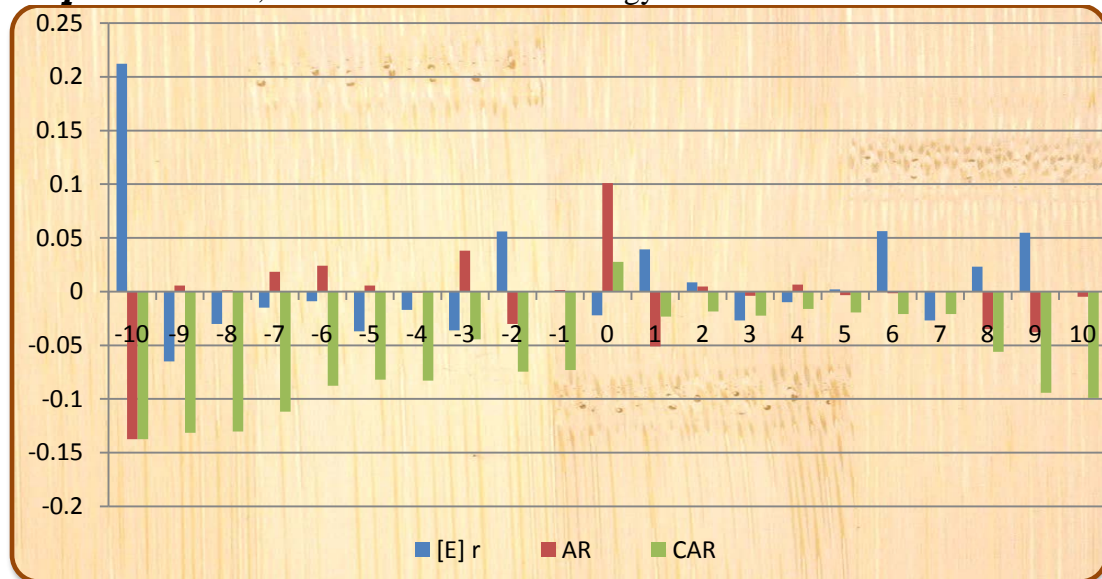
Graph 6.47 ER, AR and CAR of SRF Limited

48. SRM ENERGY LIMITED: The abnormal returns on share prices of SRM Energy Limited are statistically significant and positive only on the event day. The abnormal returns are statistically insignificant on rest all days of event window. The CAR values are negative on all the days of the event window except on the day of acquisition announcement. The values are positive because of comparatively high value in abnormal return (10.09%) on the event day.

Table 6.50 [E]r, AR and CAR values of SRM Energy Limited

Days	[E] r	AR	CAR	t-test on AR
-10	0.2121	-0.1373	-0.1373	-0.3822
-9	-0.0650	0.0057	-0.1315	0.1422
-8	-0.0300	0.0013	-0.1302	0.0320
-7	-0.0150	0.0184	-0.1117	0.4547
-6	-0.0090	0.0240	-0.0877	0.5925
-5	-0.0370	0.0057	-0.0819	0.1423
-4	-0.0170	-0.0008	-0.0828	-0.0217
-3	-0.0360	0.0382	-0.0445	0.9418
-2	0.0561	-0.0300	-0.0745	-0.7391
-1	-0.0002	0.0014	-0.0731	0.0357
0	-0.0220	0.1009	0.0277	2.4861***
1	0.0393	-0.0510	-0.0232	-1.2575
2	0.0085	0.0046	-0.0186	0.1138
3	-0.0270	-0.0039	-0.0225	-0.0973
4	-0.0100	0.0065	-0.0160	0.1618
5	0.0021	-0.0033	-0.0193	-0.0820
6	0.0563	-0.0014	-0.0208	-0.0356
7	-0.0270	-0.0002	-0.0210	-0.0062
8	0.0232	-0.0350	-0.0561	-0.8644
9	0.0549	-0.0380	-0.0942	-0.9376
10	0.0002	-0.0049	-0.0991	-0.1214

Note: *** Significant at 1% Level

Graph 6.48 ER, AR and CAR of SRM Energy Limited

49. STONES INDIA LIMITED: The abnormal returns on share prices of Stones India Limited are statistically significant on 2nd 4th 7th 8th 9th and 10th day prior to acquisition announcement and on 6th and 9th day after acquisition announcement. The abnormal returns are positive on the days near the event window *i.e.* on 2nd and 4th day prior to event day and on 6th day after acquisition announcement. This indicates the market has reacted positively to the acquisition announcement surrounding the event. The CAR values are negative for entire event window.

50. TCS LIMITED: In case of TCS Limited, the abnormal returns on share prices of the company are statistically insignificant on all the days surrounding event. This indicates that acquisition announcement has not affected the share prices of the company. The CARs are positive on all the day of the event window. The CAR values are high because of high positive abnormal returns on the few days of the event window.

Table 6.51 [E]r, AR and CAR values of Stones India Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.1150	-0.1634	-0.1634	-4.6744***
-9	-0.0020	-0.0480	-0.2115	-1.3746*
-8	0.0050	-0.0548	-0.2663	-1.5668*
-7	0.0113	-0.0610	-0.3274	-1.7456**
-6	0.0404	-0.0363	-0.3638	-1.0397
-5	-0.0080	0.0050	-0.3587	0.1446
-4	-0.0060	0.0521	-0.3066	1.4904*
-3	0.0131	0.0363	-0.2702	1.0389
-2	-0.0340	0.0497	-0.2204	1.4234*
-1	-0.0040	0.0297	-0.1907	0.8510
0	0.0029	-0.0142	-0.2049	-0.4062
1	0.0010	-0.0202	-0.2251	-0.5784
2	-0.0250	0.0142	-0.2108	0.4083
3	0.0165	-0.0164	-0.2273	-0.4708
4	-0.0100	0.0252	-0.2021	0.7216
5	0.0065	-0.0156	-0.2178	-0.4487
6	-0.0070	0.0569	-0.1608	1.6275*
7	0.0024	0.0011	-0.1597	0.0326
8	0.0128	0.0327	-0.1269	0.9368
9	0.0013	-0.0510	-0.1780	-1.4593*
10	0.0077	0.0270	-0.1509	0.7739

Note: * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level

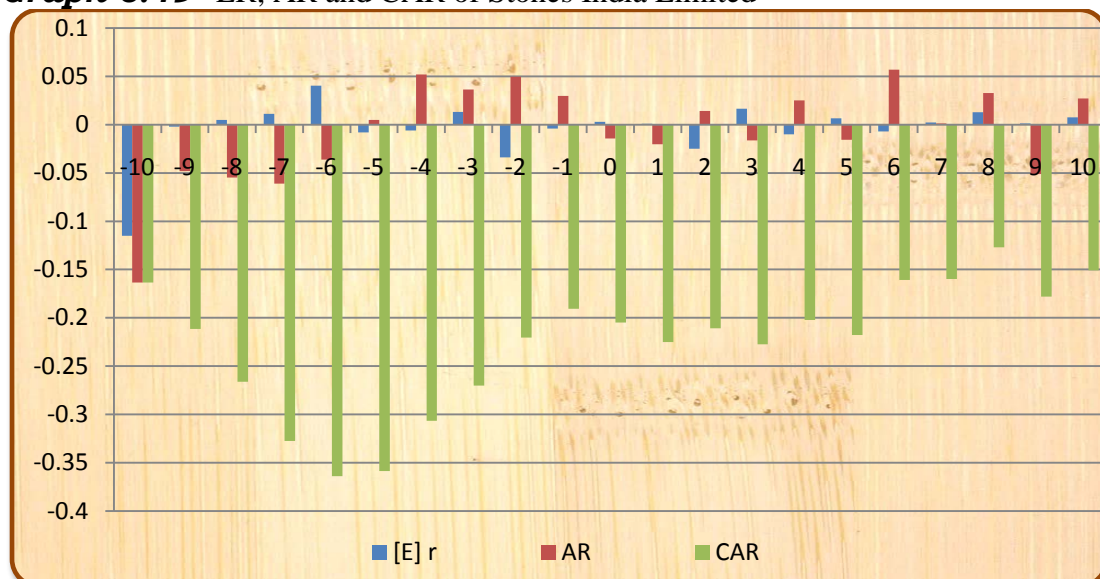
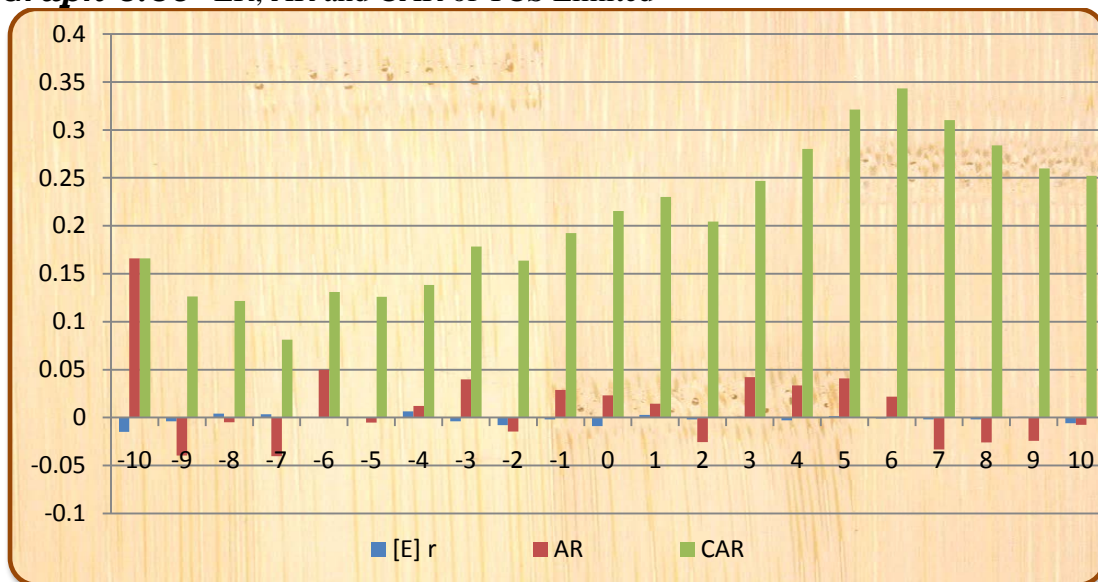
Graph 6.49 ER, AR and CAR of Stones India Limited

Table 6.52 [E]r, AR and CAR values of TCS Limited

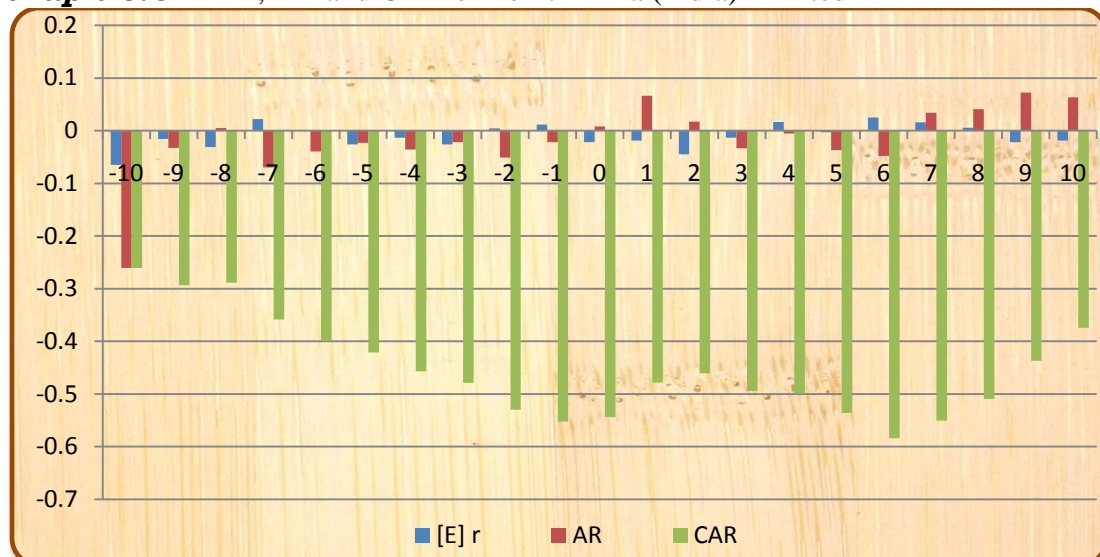
Days	[E] r	AR	CAR	t-test on AR
-10	-0.0150	0.1661	0.1661	0.9470
-9	-0.0040	-0.0397	0.1264	-0.7045
-8	0.0040	-0.0048	0.1215	-0.0866
-7	0.0035	-0.0402	0.0812	-0.7146
-6	-0.0002	0.0498	0.1310	0.8842
-5	0.0002	-0.0051	0.1259	-0.0910
-4	0.0066	0.0123	0.1383	0.2189
-3	-0.0040	0.0400	0.1783	0.7098
-2	-0.0080	-0.0145	0.1637	-0.2579
-1	-0.0020	0.0287	0.1924	0.5090
0	-0.0090	0.0230	0.2155	0.4094
1	0.0029	0.0146	0.2301	0.2592
2	-0.0020	-0.0256	0.2045	-0.4546
3	0.0006	0.0422	0.2467	0.7485
4	-0.0030	0.0335	0.2803	0.5959
5	0.0014	0.0409	0.3213	0.7270
6	-0.0010	0.0219	0.3432	0.3898
7	-0.0020	-0.0331	0.3101	-0.5881
8	-0.0020	-0.0260	0.2840	-0.4623
9	0.0008	-0.0243	0.2597	-0.4313
10	-0.0060	-0.0074	0.2522	-0.1327

Graph 6.50 ER, AR and CAR of TCS Limited

51. ZENITH BIRLA (INDIA) LIMITED:**Table 6.53** [E]r, AR and CAR values of Zenith Birla (India) Limited

Days	[E] r	AR	CAR	t-test on AR
-10	-0.0650	-0.2608	-0.2608	-0.9331
-9	-0.0160	-0.0326	-0.2935	-0.868
-8	-0.0310	0.0048	-0.2886	0.1297
-7	0.0221	-0.0697	-0.3584	-1.8543**
-6	0.0007	-0.0396	-0.3980	-1.0527
-5	-0.0260	-0.0228	-0.4208	-0.6069
-4	-0.0130	-0.0360	-0.4568	-0.9583
-3	-0.0260	-0.0221	-0.4790	-0.5886
-2	0.0041	-0.0511	-0.5301	-1.3590*
-1	0.0115	-0.0220	-0.5522	-0.5866
0	-0.0220	0.0081	-0.5440	2.1375**
1	-0.0190	0.0661	-0.4779	1.7570**
2	-0.0450	0.0172	-0.4607	0.4583
3	-0.0130	-0.0331	-0.4938	-0.8818
4	0.0164	-0.0053	-0.4991	-0.1407
5	-0.0030	-0.0370	-0.5361	-0.9838
6	0.0251	-0.0480	-0.5842	-1.2771
7	0.0156	0.0338	-0.5503	0.8997
8	0.0054	0.0409	-0.5094	1.0870
9	-0.0220	0.0724	-0.4370	1.9250**
10	-0.0190	0.0630	-0.3740	1.6749*

Note: * Significant at 10% level, ** Significant at 5% level

Graph 6.51 ER, AR and CAR of Zenith Birla (India) Limited

The abnormal returns on share prices are statistically significant and negative on 2nd and 7th day prior to acquisition announcement. The returns are statistically significant and positive on 1st 9th and 10th day after acquisition announcement and also on the day of acquisition announcement. The CAR values are negative for the entire event window. The minimum value of CAR is 58.42% on the 6th day after the event and the maximum value is -26.08% on the 10th day prior to acquisition announcement.

The next section discusses the summary of results and testing of hypotheses of the study of effect of acquisition announcement on share price of the individual sample companies.

6.3 SUMMARY OF RESULTS

To examine whether the acquisition announcement has affected the share price of the acquirer companies on the event day and on the days surrounding the event day or not, the abnormal returns for the entire event window *i.e.* (-10, +10) days are calculated. The t-test is applied on abnormal returns. The summary is presented in Table 6.54. For this the null hypothesis as follows is framed.

H_{013} : The Abnormal Return (AR) of the share price of the sample acquirer firm announcing an acquisition is not significantly affected by this type of information on the announcement date and surrounding the announcement date.

The summary of entire event window for which the number of companies which have significantly positive, negative or non significant t values is presented in Table 6.55.

Table 6.54 Testing of Hypothesis for the Entire Event Window

Days	Sample Acquirer Companies												
	1	2	3	4	5	6	7	8	9	10	11	12	13
-10	-	+ve	-	+ve	-	-	-ve	-	-ve	-	-	-ve	-
		S**		S****			S*		S****			S**	
-9	-	-ve	-	-	-	-	-	-	-	+ve	-ve	+ve	-
		S*								S****	S*	S**	
-8	-	-	-	-	-	-	-	-	-	+ve	-	-	+ve
										S****			S*
-7	-	+ve	-	-	-	-	-	-	-	-	-	-	-
		S*											
-6	-	+ve	-	-	-	-	-	-	-	-	-	-	+ve
		S*											S*
-5	-	-	-	+ve	-	-	-	-	-	-	-	-	-
				S*									
-4	-	-	+ve	+ve	-ve	+ve	-	-	-	-	-ve	-	-
			S**	S**	S*	S**					S*		
-3	-	+ve	-	-	-	-	-	-	-	-	-	-	-
		S*											
-2	-	-	-	+ve	-	-	-	-	-	-	-	-	-
				S*									
-1	-	+ve	-ve	-	-	-	-	-	-	+ve	-	+ve	-
		S****	S****							S**		S**	
0	-	-	-ve	-	-ve	-	-ve	-	-	-	-ve	+ve	-
			S****		S*		S**				S**	S****	
1	+ve	-	-	-	-ve	-	-	-	-	-	-	-ve	-
	S*				S*							S*	
2	-	-ve	-ve	-	-	-	-	-	-	-	-	-	-
		S*	S*										
3	-	+ve	-	-	-	-	-	-	-	-	-	-ve	-
		S**										S*	
4	-	-	-ve	-ve	-	-	-	-	-	-	-	-ve	-
			S*	S*								S**	
5	-	-ve	+ve	-	-	-	-	-	-	-	-	-	-
		S*	S**										
6	-	-	+ve	-	-	-	-	-	-	+ve	-	-	-
			S*							S**			
7	-	-	-	-	-	-	+ve	-	-	-	-	-	-
							S**						
8	-ve	+ve	-ve	-	-	-	-	-	-	-ve	-	-	-
	S**	S****	S*							S*			
9	-	-ve	-	-	-	-	-	-	-	-	-	-	-
		S**											
10	-	-	+ve	-	-	-	-	-	-ve	-	-	-	-
			S**						S*				

Days	Sample Acquirer Companies													
	14	15	16	17	18	19	20	21	22	23	24	25	26	
-10	-	-	-	-ve	-ve	-	-	-	-	-	+ve	-	+ve	
				S***	S**						S**		S*	
-9	-	-	-	-	-	-	-ve	-	-	-	-	-	+ve	
							S*						S***	
-8	-	-	-	-	-	+ve	-	-ve	-	-	-	-	-	
						S*		S*						
-7	-	-	-	-ve	-	-	-	-	-	-	-	-	-	
				S**										
-6	-ve	-	-	-	-	-	-	-	-	-	-	-	-	
	S**													
-5	-	-	-	-	-	-	-	-	-	-	-	-	-	
-4	-	-	-	-	-	-ve	-	-	-	-ve	-	-	-	
						S*				S*				
-3	-	-	-	-	-	-	-	-	-	-	+ve	+ve	+ve	
											S**	S***	S***	
-2	-	-	-	-	+ve	-	-	-	-	-	-	+ve	+ve	
					S**							S**	S***	
-1	-	-	-	-	-	-	-	-	-	-	-	-	-	
0	-	-	-	+ve	-	+ve	-	-	-	-	-	-	+ve	
				S*		S*							S**	
1	-	-	-	+ve	-	-	-	-	+ve	-	-	-	-	
				S*					S*					
2	-	-	-	-	-	-ve	-	+ve	-	-	-	+ve	-	
						S*		S**				S***		
3	-	-	-	-	-	-	-	+ve	-	-	-ve	-	+ve	
								S*			S***		S*	
4	+ve	-	-	-	-	-	-	+ve	-	-	-ve	-	-	
	S*							S**			S*			
5	+ve	-	-	-	-	-	-	-	-	-	-	-	+ve	
	S*												S*	
6	-	+ve	-	-	-	-	-ve	-	-	-	-	-ve	-	
		S*					S**					S*		
7	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	-	-	-	-	-	-	-	+ve	-	-	-	-	-	
								S**						
9	-	-	-	-	-	-	-	-	-	-	-ve	-	+ve	
											S**		S***	
10	-	-	-	-	-	-	-	-	-	-	-	-	-	

Days	Sample Acquirer Companies												
	27	28	29	30	31	32	33	34	35	36	37	38	39
-10	-	-	-	-	-	-	-	-	-	-	-	-	-
-9	-	-	+ve	-	-	-	-	-	-	-	-	-	-
			S**										
-8	-	-	+ve	-	-	+ve	-	-	-	-	-	-	-
			S**			S**							
-7	-	-	-	-	-	-	-	-	-ve	+ve	-	-	-
									S**	S*			
-6	-	-	-	-	-	-	-	-	-	+ve	-	-	-
										S*			
-5	-	-	-	-	-	+ve	-	-	-	-	-	-	-
						S**							
-4	-	-ve	-	-	-	-	-	-	-	-	-	+ve	-
		S**										S*	
-3	-	-	-	-ve	-	-	-	-	-	+ve	-	-	-
				S*						S*			
-2	-	-	-	-	-	-	-	-	-	-	-	-	+ve
													S****
-1	-	-	-	-ve	-	+ve	-ve	-	-	+ve	-	-	+ve
				S*		S*	S*			S****			S*
0	-	+ve	-	+ve	-	+ve	+ve	+ve	-	-	-	-	-ve
		S****		S**		S**	S**	S**					S****
1	-	-ve	-ve	-	-	+ve	-	-	-	-	-	-	+ve
		S**	S**			S*							S**
2	-	-	+ve	-	-	+ve	-	-	-	+ve	-	-	-
			S**			S*				S*			
3	-	+ve	-	-	-	-	-	-	-	+ve	-	-	+ve
		S****								S**			S**
4	-	-	+ve	-	-	-	-	-	-	-	-	-	-
			S*										
5	-	-	-	-	-	-	-	-	-	-ve	-	+ve	-
										S*		S*	
6	-ve	-	-	-	-	+ve	-	-	-	-	-	+ve	-ve
	S*					S*						S****	S*
7	-ve	-	-	-	-	-	+ve	-	-	-	-	-	-
	S*						S*						
8	-	-	-	-	-	-	+ve	-	+ve	+ve	-	-	-ve
							S**		S****	S****			S*
9	+ve	-	-	-ve	-	-	+ve	-	+ve	-ve	-	-	-
	S****			S**			S*		S****	S**			
10	-	-	-	-ve	-	-	-	-	-	-	-	-	-
				S**									

Days	Sample Acquirer Companies											
	40	41	42	43	44	45	46	47	48	49	50	51
-10	-	-	+ve	-ve	-	-ve	-	-	-	-ve	-	-
			S****	S**		S****				S****		
-9	-	+ve	-	-	-	+ve	-	-	-	-ve	-	-
		S*				S*				S*		
-8	-	+ve	+ve	-	-	+ve	+ve	-	-	-ve	-	-
		S*	S*			S****	S*			S*		
-7	-	-ve	-	-ve	-	-ve	-	+ve	-	-ve	-	-ve
		S*		S*		S****		S**		S**		S**
-6	-	-	-	-ve	-	-ve	-	-ve	-	-	-	-
				S*		S****		S**				
-5	-	-	-	-	-	+ve	-	-	-	-	-	-
						S****						
-4	-	-	+ve	-	-	+ve	-	-	-	+ve	-	-
			S****			S****				S*		
-3	-	-	-	-	-	+ve	-	-	-	-	-	-
						S****						
-2	-	-	+ve	-ve	-	+ve	-	-	-	+ve	-	-ve
			S****	S****		S**				S*		S*
-1	-ve	-	-	-	-	+ve	-	-	-	-	-	+ve
	S****					S**						S**
0	-ve	-	-	-	-	+ve	+ve	-	+ve	-	-	+ve
	S****					S****	S**		S****			S**
1	-	-	-	-	-	+ve	-	-	-	-	-	-
						S*						
2	-	-	-ve	-ve	-	+ve	-	-	-	-	-	-
			S*	S*		S*						
3	-ve	-	-ve	-ve	-	-	-	-	-	-	-	-
	S****		S****	S**								
4	-	-	-	-	-	-	-	-ve	-	-	-	-
								S**				
5	+ve	-ve	-	-	-	-	-	-	-	-	-	-
	S****	S**										
6	+ve	-	-	-	-	-	-	-	-	+ve	-	-
	S****									S*		
7	+ve	-	-	-ve	-	-	-	-ve	-	-	-	-
	S****			S**				S****				
8	-	+ve	-	-	-	-	-	-	-	-	-	-
		S*										
9	-	-	-	-	-	-	-	-	-	-ve	-	+ve
										S*		S**
10	-	-	-ve	-	-	-	-	-	-	-	-	+ve
			S****									S*

Note:

1. * Significant at 10% level, ** Significant at 5% level, *** Significant at 1% Level.
2. +ve indicate Positive Abnormal Return and -ve indicates Negative Abnormal Return.
3. Number 1 to 51 indicates sample acquirer companies.

Table 6.55 Summary of Hypothesis Testing for Entire Event Window

Days	No. of Companies			
	Non Significant	Significantly +ve	Significantly –ve	Total
-10	38	5	8	51
-9	41	6	4	51
-8	40	9	2	51
-7	41	3	7	51
-6	44	3	4	51
-5	48	3	-	51
-4	39	7	5	51
-3	44	6	1	51
-2	41	8	2	51
-1	39	8	4	51
0	32	13	6	51
1	41	6	4	51
2	40	6	5	51
3	40	6	5	51
4	43	3	5	51
5	43	5	3	51
6	40	7	4	51
7	45	3	3	51
8	41	6	4	51
9	41	5	5	51
10	46	2	3	51

The following are the observations from the Tables 6.54 and 6.55:

1. It can be observed from the Table 6.55 that the significant change in t values is for 19 companies on the announcement date. The t value is significantly positive for 13 companies and significantly negative for 6 companies. The maximum negative t values (for 8 companies) are observed on 10th day prior to event window, where t value is statistically significant for 13 companies. The t values are significant only for 3 companies on the 5th day prior to announcement date and for 5 companies on the 10th day after the announcement date.
2. It is observed from the Table 6.54 that for the 10 companies *i.e.* Bodal Chemicals Limited (6), GMR Infrastructures Limited (13), Heritage Foods India Limited (15), Nilkamal Limited (22), Sona Koyo Steering Systems Limited (26), Tata Power Limited (32), United Credit Limited (34), All Sec Technologies Limited (38), Piramal Enterprises Limited (46), SRM Energy Limited (48) whenever the abnormal returns on share price are statistically significant, they have positive movement during the event window. This indicates that the share market has reacted positively to the acquisition announcement of these sample companies and the share holders of acquirer companies gain from the acquisition announcement.
3. Opposite to the above observation, it is noticed for 6 companies *i.e.* Bharat Heavy Electricals Limited (5), Century Plyboards India Limited (9), Epic Energy Limited (11), Lupin Limited (20), Pidilite Industries Limited (23) and Mahindra & Mahindra Limited (43) that whenever the abnormal returns on share price are statistically significant, they have negative movement during the event window. This indicates that the share market has reacted adversely to the acquisition announcement of these sample companies.
4. Autoline Industries Limited (4), Satra Properties India Limited (24) and Jayshree Tea Industries Limited (42) reflected increase in abnormal returns on share price before the acquisition announcement and decrease in the same after the acquisition announcement. Similar pattern is observed in case of Exide Industries Limited (12) where mixed reaction is there in pre acquisition

period but there is a significant decrease in abnormal returns after the acquisition announcement.

5. The observation is contradictory for Bombay Burma Trading Corporation Limited (7), Godrej Properties Limited (14), Modern India Limited (21), Tata Steel Limited (33), Videocon industries limited (35) and Zenith Birla (India) Limited (51). These companies show decrease in abnormal returns on the share price before acquisition announcement and increase in the same after announcement.
6. For the 7 companies *i.e.* Carborundum Universal Limited (8), Indoco Remedies Limited (16), Systematix Corporate Services Limited (31), AIA Engineering Limited (37), Orient Paper Industries Limited (44) and TCS Limited (50) the abnormal return on the share price are insignificant on all the event days. This indicates that acquisition announcement has not affected the share price of these companies.
7. The important observation is regarding event day *i.e.* the day on which acquisition took place. The abnormal returns on share prices are statistically significant for 19 sample companies. For 6 companies, Apollo Tyres Limited (3), BHEL (5), Bombay Burma Trading Corporation Limited (7), Epic Energy Limited (11), Dr Reddy's Laboratories Limited (39) and Genus Power Infrastructures Limited (40) the abnormal returns have decreased indicating negative effect of acquisition announcement on share price. The abnormal returns on share price are positive for Exide Industries Limited (12), Jet Airways (India) Limited (17), Kovai Medical Center & Hospital Limited (19), Sona Koyo Steering Systems Limited (26), Speciality Papers Limited (28), Sundram Fasteners Limited (30), Tata Power Limited (32), Tata Steel Limited (33), United Credit Limited (34), Panama Petrochem Limited (45), Piramal Enterprises Limited (46) SRM Energy Limited (48) and Zenith Birla (India) Limited (51) indicating positive effect of acquisition announcement on share price.

6.4 EMPIRICAL RESULTS OF AVERAGE ABNORMAL RETURN, CUMULATIVE AVERAGE ABNORMAL RETURN AND t TEST ON AVERAGE ABNORMAL RETURN FOR ALL SAMPLE COMPANIES

Table 6.56 Average AR, CAAR, t values and hypothesis

Days	AAR	CAAR	AAR t-test	Hypothesis
-10	0.0200	0.0200	2.7053***	H ₀₁₄ Rejected
-9	0.0114	0.0314	1.5476*	H ₀₁₄ Rejected
-8	-0.0052	0.0262	-0.7083	H ₀₁₄ Accepted
-7	-0.0076	0.0185	-1.0405	H ₀₁₄ Accepted
-6	-0.0092	0.0092	-1.2465	H ₀₁₄ Accepted
-5	-0.0067	0.0026	-0.9055	H ₀₁₄ Accepted
-4	-0.0016	0.0009	-0.2207	H ₀₁₄ Accepted
-3	-0.0002	0.0007	-0.0309	H ₀₁₄ Accepted
-2	0.0636	0.0643	8.6053***	H ₀₁₄ Rejected
-1	-0.0005	0.0638	-0.0692	H ₀₁₄ Accepted
0	0.0130	0.0769	1.7664*	H ₀₁₄ Rejected
1	0.0206	0.0975	2.7970***	H ₀₁₄ Rejected
2	-0.0036	0.0939	-0.4901	H ₀₁₄ Accepted
3	-0.0001	0.0938	-0.0141	H ₀₁₄ Accepted
4	0.0007	0.0946	0.1068	H ₀₁₄ Accepted
5	0.0012	0.0959	0.1732	H ₀₁₄ Accepted
6	0.0065	0.1024	0.8827	H ₀₁₄ Accepted
7	-0.0035	0.0989	-0.4786	H ₀₁₄ Accepted
8	0.0026	0.1016	0.3640	H ₀₁₄ Accepted
9	-0.0081	0.0934	-1.1034	H ₀₁₄ Accepted
10	0.0022	0.0956	0.2977	H ₀₁₄ Accepted

Note: * Significant at 10% level, *** Significant at 1% Level

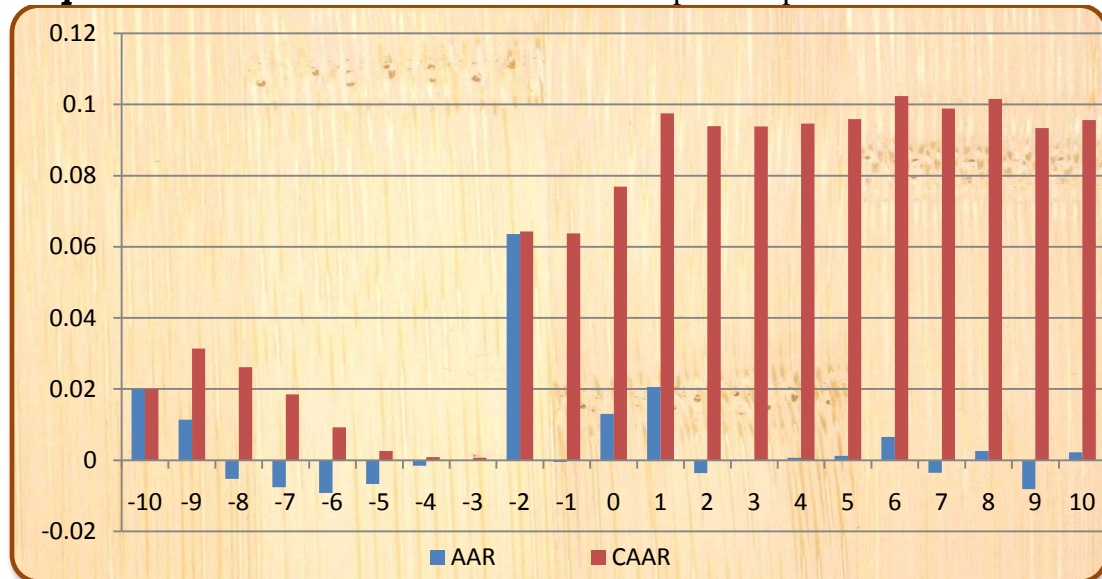
To examine whether the acquisition announcement has affected the share price of the entire sample of acquirer companies or not, Average Abnormal Returns (AAR) on and surrounding the event day are calculated. The t-test was applied on AARs of entire event window. The summary is presented in Table 6.56. To examine this following null hypothesis is framed.

H_{014} : The Average Abnormal Return (AAR) from the share price of the sample acquirer firms in the sample announcing an acquisition is not significantly affected by this type of information on the announcement date and surrounding the announcement date.

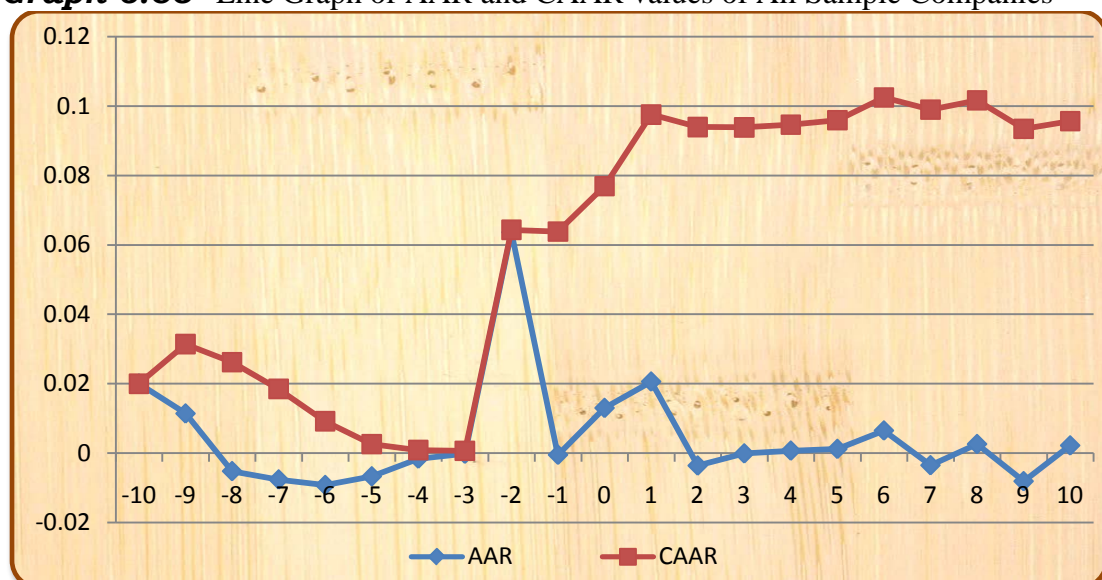
Based on the results of the t-test analysis the Null Hypothesis **H_{014}** is **rejected** for announcement date *i.e.* **event date** since t-test reveals a statistically significant difference in AAR value. Thus, it is concluded that the Average Abnormal Return (AAR) of the share price of the sample acquirer firms announcing an acquisition is significantly affected by acquisition announcement on the announcement date. The results of t test applied on the AARs surrounding the event day for all 51 sample domestic acquirer companies, indicate that the AARs are positive and statistically significant on 2nd, 9th and 10th day before the event day and also on the 1st day after the event day. Therefore, the null hypothesis **H_{014}** is **rejected** for 2nd, 9th and 10th day prior to acquisition announcement and on 1st day after announcement, since t-test reveals a statistically significant difference in AAR values. This indicates that the AARs of the entire sample are significantly affected on these days by the type of information on the announcement date.

It can be observed that returns for stocks of domestic sample acquirer companies involved in acquisitions exceed average market returns on some day in the event window and the announcement of acquisition has positive impact on stock market, specially in the event window of (-2,+1) days. Ayoush(2011)⁵ has performed study for the sample of domestic acquiring companies of U.K. and concluded that domestic acquiring firms earn positive abnormal returns surrounding acquisition announcement. This indicates that the investors and shareholders are in favour of the deal and are willing to buy or hold more stocks of the acquirer company. This causes the actual stock returns to outperform the expected return.

The findings show that there is definitely an action in the stock price on Day 0, but the analysis displays that the acquisition may not be significant in determining the reason for the particular action. If a larger sample is taken these signs would probably be more obvious. Investors generally will view the announcements as something positive, being that the company will be increasing its market share. Therefore, an acquisition should make a shareholder optimistic about returns.

Graph 6.52 AAR and CAAR values of All Sample Companies

The bar graph of Average Abnormal Returns (AAR) and Cumulative Average Abnormal Returns (CAAR) is presented in graph 6.52. The CAAR shows continuously increasing trend specially after acquisition announcement *i.e.* after day 0. The AR is positive surrounding the Event day. Therefore, the strong effect of event announcement can be felt in window of -2 to +1days. Thus, it can be concluded from the graph 6.52 that market has reacted positively to the acquisition announcement, which is reflected in share price of the companies. These values are shown in even more clear way in Line graph, graph 6.53. The CAAR line shows continuous increasing trend and AR is highest near the event day.

Graph 6.53 Line Graph of AAR and CAAR values of All Sample Companies

6.5 EMPIRICAL RESULTS OF CAAR AND t TEST ON CAAR FOR SELECTED EVENT WINDOWS

After analyzing aggregate returns for all sample companies, to examine the effect of acquisition announcement on abnormal returns of the cumulative average abnormal returns of given event window, t test is applied on 7 selected event windows. Table 6.57 presents the summary of the t-test results on Cumulative Average Abnormal Returns (CAARs) for the (-1, +1), (-2,+2), (-3,+3), (-5,+5), (-10,+10), (-1,+10), (-2, +5) event windows.

Table 6.57 Summary of t test on CAAR

Sr No	CAAR Event Windows	CAAR	t Value
1.	CAAR(-1,+1)	0.0330	2.5948*
2.	CAAR(-2,+2)	0.0930	5.6392***
3.	CAAR(-3,+3)	0.0930	4.7489***
4.	CAAR(-5,+5)	0.0870	3.5331***
5.	CAAR(-10,+10)	0.0956	2.8233***
6.	CAAR(-1,+10)	0.0312	1.2281
7.	CAAR(-2,+5)	0.0952	4.5521***

Note: * Significant at 10% level, *** Significant at 1% Level

H_{015} : The Cumulative Average Abnormal Return (CAAR) from the share price of the sample acquirer firms announcing an acquisition is not significantly affected by this type of information for a given event window, as defined in the present research.

On comparing the calculated t values with table values, it is found that the Cumulative Average Abnormal Return (CAAR) of the share price of the sample acquirer firms announcing an acquisition are significantly affected by this type of information for the event windows (-1,+1), (-2,+2), (-3,+3), (-5,+5), (-10,+10) and (-2,+5). The cumulative average abnormal returns are not statistically significant for the event window (-1,+10). Thus, the null hypothesis **H_{015}** is **rejected** for the event windows (-1,+1), (-2,+2), (-3,+3), (-5,+5), (-10,+10) & (-2,+5) and the null hypothesis **H_{015}** is **accepted** for the event window (-1,+10).

As discussed above there are favorable reactions to the announcements and this differs from findings of some studies relating to similar periods based on market activities¹⁰. The results of event studies performed on acquirer firms have not produced similar results for all researchers as it is the case with event studies on target firms. Many researches show no effect of acquisition announcement on share price of the company, some show positive effect and some negative.

6.6 CONCLUSION

The occurrence of economic event has shown to have a considerable impact on the value of the firm to which the event is related to. Efficiency of financial markets signifies that the markets behave rationally and that the effect of the event will be echoed in the company's share price. Thus share prices are used to evaluate the reaction of financial markets, of whether there was a statistically significant change to past occurrence of a given type of an event and the change in return to the shareholders in the period surrounding the announcement of an event (Campbell, Lo and MacKinlay, 1997)¹¹. The results of event studies show that the abnormal returns around the acquisition announcement date are significantly positive for acquirer companies, which is similar to the results of previous studies^{6,12,13,14,15,16,17,18,19}. As it is mentioned in research methodology, the present research was conducted on acquiring firms. It is observed that acquiring firms are not benefited much in the long run from acquisition activity, but gains are surely observed in short run. Many studies are conducted to measure the effect of acquisition on the companies, but majority of the studies are focusing on acquired or target firms, very few studies are conducted for acquirer firms. It is observed in the study of target firms that they experience higher abnormal returns than acquirer because of acquirers paying premiums for their targets for acquisition^{6,15,20}. But the purpose of this research is to find out that whether corporate restructuring activity, which is happening day in and day out across the globe, is beneficial for the firm who is initiating it and playing the most important role in it *i.e.* acquiring firm.

It is mentioned in section 6.3 that the Cumulative Average Abnormal Returns of shareholders of acquiring firms are positive, surrounding the announcement day. This indicates that the information concerning an acquisition is considered as good news

by shareholders of acquiring firms. Evidence on the significantly positive changes of abnormal return suggests that the shareholders of acquiring firms support acquisition deals as they expect future efficiency of the acquisition and thus gain from the same. The analysis of effect of acquisition announcements on abnormal returns on the days surrounding the event day, should be done with caution. These results are merely reflections of investors' expectations, high abnormal returns surrounding an acquisition announcement definitely do not guarantee the success of an acquisition in the long run in terms of actual performance¹⁵.

There are two important points to mention here, (i) share price movement before the acquisition date could be because of information leakage, which is not supported by semi strong form of efficient market hypothesis and (ii) Increase in abnormal return on the share price for acquirer companies after acquisition may indicate that share holders believe that the acquisition will provide competitive advantage to the company and will be beneficial for company. Opposite to this, decrease in abnormal returns of the share price of the acquirer companies after the acquisition date could be due to high premium paid by the acquirer companies to the target companies. The further research can be carried out to find the significance of both the points. In addition to that, it is important to note that this study only analyzes the effect on the acquiring firm. This study may lead into further review of the effects of the acquisition announcement on a target company.

The empirical analysis of Chapter 5 analyzes the effect of acquisition on the long term performance of the company with the help of ratio analysis, taking all sample companies together and dividing the sample according to sector and Chapter 6 analyzes the effect of acquisition on share price of the acquirer companies.

The “Major Findings and Conclusion” from the same are presented in Chapter 7. The Chapter 7 also presents suggestions for further research.

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