

Event Driven – Linear Dynamics of Price and Return

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Abstract

The infusion of information in stock market is observed in terms of price, volatility, return, and trading movement. Existing literatures identifies that an event that corresponds to specific stock alters the dynamics of trades of that specific stock. The current study refers to the literature considering the perspectives in which an event is analyzed, uses CAPM model, AR, CAR and t-statistics to propagate the linear aspects of the identified event on return. Interestingly, the current study includes a dynamic event which induced corporate actions and market development. A study of this nature is valuable for gaining insights into often unexplored perspectives of events. This study provided valuable insights into how markets respond to corporate events with a specific focus on the Adani Group's stock prices following the release of the Hindenberg Research report.

JEL Code : G1, G12, G14, G19,

Keywords : Event study; Linearity; Scrips; Price; Stock Market; Return; Adani; BSE; NSE; India.

I. Introduction

EVENT STUDIES SERVE AS a crucial methodological approach in the realm of financial markets, offering insights into the effects of specific events on stock prices, trading volume, and overall market dynamics. These studies play a vital role in understanding how market behavior responds to various stimuli, including news events and significant occurrences, both domestically and globally. By examining market reactions before, during, and after such events, event studies provide valuable insights into the mechanisms driving market fluctuations and their implications for investors. Moreover, they help identify critical events within the financial market landscape, guiding decision-making processes for market participants and researchers alike. In

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The analysis's conclusions unequivocally demonstrated that an incident has significantly influenced the share prices of the targeted companies and their competitors. The data analysis provides statistical proof that 10 companies out of 14 embrace the alternative hypothesis (H1). Future studies may concentrate on broadening the scope of the investigation to include additional market indices and utilizing cutting-edge techniques like neural networks, machine learning models, and other linear and nonlinear models that offer improved forecasting accuracy in terms of timing the occurrence.

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Annexure I
Return based on before and after event

Before Event	AR	No News		After Event	Bad News		
		2 CAR	5 CAR		AR	2 CAR	5 CAR
-43	0	0	0	1	0.0146	2.2421	201.4599
-42	0.0698	0.0698	0.0698	2	0.1624	2.4046	211.4959
-41	0.0136	0.0834	0.5844	3	0.0021	2.4066	222.2165
-40	0.0192	0.1026	1.2567	4	0.0489	2.4555	233.6940
-39	0.0190	0.1215	2.0521	5	0.3137	2.7693	245.9360
-38	0.0855	0.2071	3.0157	6	0.3199	3.0892	258.5291
-37	0.0340	0.2411	4.1407	7	0.0743	3.1635	271.0417
-36	0.0154	0.2257	5.4634	8	0.0565	3.2201	283.5653
-35	0.0642	0.2898	7.0423	9	0.0998	3.1203	296.1357
-34	0.0786	0.3684	8.8674	10	0.1116	3.0087	308.9473
-33	0.0703	0.4387	10.8784	11	0.1659	3.1746	322.1663
-32	0.0432	0.4819	13.0529	12	0.0923	3.2668	335.6841
-31	0.0541	0.5360	15.4089	13	0.0946	3.3614	349.4654
-30	0.0183	0.5543	17.9297	14	0.0547	3.4162	363.4908
-29	0.0480	0.6023	20.6513	15	0.0571	3.4733	377.8022
-28	0.0610	0.6633	23.5889	16	0.0570	3.5303	392.4220
-27	0.0376	0.7009	26.7528	17	0.0752	3.6056	407.3978
-26	0.0540	0.7549	30.1186	18	0.0966	3.7022	422.7157
-25	0.0635	0.8185	33.6658	19	0.0796	3.7818	438.3728
-24	0.0711	0.8895	37.3926	20	0.1044	3.8862	454.4154
-23	0.0133	0.9028	41.2536	21	0.0614	3.9477	470.6432
-22	0.0336	0.9364	45.3037	22	0.0938	4.0414	486.9430
-21	0.0616	0.9980	49.5484	23	0.1258	4.1672	503.2276
-20	0.0257	1.0238	53.9405	24	0.0958	4.0715	519.3082
-19	0.0681	1.0919	58.5809	25	0.0518	4.0196	535.3092
-18	0.0391	1.1310	63.4681	26	0.0067	4.0263	551.3200
-17	0.0143	1.1454	68.5769	27	0.0631	3.9632	567.4000
-16	0.1268	1.2721	73.9458	28	0.0287	3.9919	583.6633
-15	0.0666	1.3387	79.4751	29	0.0375	4.0294	600.0867
-14	0.0140	1.3527	85.1916	30	0.0661	4.0955	616.7342
-13	0.0527	1.4054	91.1583	31	0.0510	4.1465	633.5263
-12	0.0271	1.4325	97.3746	32	0.0056	4.1521	650.4673
-11	0.0934	1.5259	103.8597	33	0.1014	4.2535	667.6142
-10	0.0771	1.6030	110.5725	34	0.0134	4.2401	684.9301
-9	0.0520	1.6550	117.5076	35	0.0553	4.2954	702.4992
-8	0.0464	1.7013	124.6864	36	0.0625	4.3579	720.3396
-7	0.0522	1.7535	132.1476	37	0.0647	4.4226	738.4402
-6	0.0719	1.8254	139.9192	38	0.0706	4.4932	756.7867
-5	0.0733	1.8987	147.9680	39	0.0734	4.5667	775.3693
-4	0.0850	1.9837	156.2960	40	0.0514	4.6181	794.2264
-3	0.0802	2.0639	164.8679	41	0.0505	4.6686	813.3121
-2	0.0388	2.1026	173.6180	42	0.0607	4.7293	832.6840
-1	0.0752	2.1778	182.6701	43	0.1119	4.8412	852.3674

Source: Self Computed based on NSE data