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IMPACT OF GENERAL ELECTION ON STOCK MARKET: A CASE STUDY OF NSE INDIA

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Abstract

Stock market is frequently used as a proxy to measure the economic health of an economy. This study examines the impact of the general elections and change in government on the stock market in India. The study covers four Indian general elections from 2004 to 2019. The study first verifies the linear relation between the market returns and securities returns and then employs event study methodology using secondary data from NSE India to calculate the abnormal returns. High variation in the daily stock returns is observed during the event period. Both positive and negative significant returns are found especially after the election results were declared. The paired t-test shows significant results for the 2014 election, suggesting that change in government has an impact on the stock market. The results further indicate that market shows more uncertain returns during the election held after the change in government i.e., 2019 election. The study suggests that, the investors should exercise caution during elections and adjust their investing strategy appropriately, particularly if a change in government is anticipated.

Keywords: General elections, Stock returns, Event study, NSE, Abnormal returns

JEL Classification: D72, G14, G19.

Introduction

A nation's stock market can provide insight into its economic health (Jensen et al., 1996) as such, stock markets are frequently used as a proxy for measuring it (Chuang & Wang, 2009). Stock market determines how capital flows in the nation. The first stock exchange in India i.e., BSE was established in 1875 in Bombay, where securities were traded through a paper trade system by the native share and stock broker's association, the brokers received the stock price and quantity data at the very inception. Later on, with the evolution trade and increase in number of firms and transactions, in 1992, the National Stock Exchange (NSE) was founded. Currently, one of India's leading stock exchanges is the NSE, which in 2022 ranked third in terms of the amount of cash equity transactions and was the largest derivatives exchange in terms of contracts traded. By market capitalization, it is also one of the biggest stock exchanges in the world. The NIFTY50, the NSE's flagship index, is frequently used as a gauge of the Indian capital market by investors in India and abroad.

Being the most populous and largest democracy, uncertainty with relation to the Indian general elections presents a highly significant factor on policymaking which influences the financial environment, and can have a detrimental influence on stock market movements. General elections determine the government and the political structure for the upcoming years. As such, the participants of the financial market try taking safe position during the elections. Investors' tendency to follow the crowd might occasionally cause stock prices to fluctuate too much and require them to act quickly. Sometimes it increases exponentially and sometimes it plummets.

The primary goal of this study is to examine the connection between general elections in India and stock market returns and to determine whether the announcement of election results has any impact on stock market returns and provide information about the relationship and suggestions to regular investors and other participants.

Literature review

Volatility impacts the attractiveness of the stock market for investors. Both positive and negative news do not have the same effects on investors. Positive news has less impact on the stock market than negative news (Nguyen & Nguyen, 2019). Over the year studies have shown that factors like political changes, changes in consumer's buying power, weather conditions, economic factors, etc. have shifted the tide in stock market (Balaji et al., 2018).

Studies conducted by (Cao et al., 2004); (Brahmana et al., 2015); (Sariannidis et al., 2016); (Kathiravan, Selvam, et al., 2018); (Kathiravan, Raja, et al., 2018) elaborated about the weather condition like temperature, humidity, wind level, cloud cover, etc. which have significant effect on stock market returns. Similarly, studies conducted by (Patra & Poshakwale, 2006); (Erdem et al., 2005); (Dhingra & Kapil, 2021); (Lu & Chou, 2012); (M Akbar, 2012); (Jain &

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Gondaliya, 2022) have shown that Macro-economic variable like GDP, inflation, deflation, exchange rate, money supply, etc have constructive association with stock market returns. (Chuang & Wang, 2009) while examining the impact of political change on developed market show that stock returns before the 1987 crash was lower than the stock returns after the crash in 1987.

In relation to political changes, it is evident that financial markets are significantly affected by the uncertain electoral outcomes and political changes (Kim & Mei, 2001). An examination of the presidential elections in US and stock market returns shows that business cycle and stock returns are affected by political outcomes and that political uncertainty is observed by and priced in the Equity market (Li & Born, 2006). The increase in market indices of various industries is significant in relation to the distribution of the daily returns (Ferri, 2008).

Market returns are aligned with political business cycle and the impact of elections on the stock markets greatly depends on the party who wins (Huang, 1985). Significant political developments leave their mark on how stock returns are distributed. In developing nations, where markets reward investors for assuming such risk, political unpredictability is increasing significantly (Wisniewski, 2016). (Jensen & Schmith, 2005) while examining the relation between rise of Lula and Brazilian stock market, observed that rise of Lula (i.e., a specific party) had no significant impact on the stock market's mean returns. Similarly, on examination of elections in Taiwan no relationship was found between stock market and any particular political party (Hung, 2011).

In a study by (Pantzalis et al., 2000) investigating the reaction of market indices in relation to elections, positive abnormal returns were found specially for two weeks prior to the elections. While lower stock returns after the elections were observed as compared to stock returns after the returns (Menge, 2013). In another study it is observed that second year of the election cycle shows lower stock returns as compared to prior years (Foerster & Schmitz, 1997).

The evolving pattern of results also affect the financial market (Steeley, 2003). While examining the impact of the delay in election result announcement in US, unfavourable returns were observed immediately after the delays (Nippani & Medlin, 2002).

In India, the literature in relation to election and stock market returns is very scarce. Where, studies like (Reddy, 2018) and (Garg et al., 2022) have evidenced that general election have positive and beneficial impact on the performance of the stock market. Studies like (Balaji et al., 2018) observe that stock market is greatest in the short run (10 days after the election), as opposed to the medium (20 days) and long term (30 days).

Several studies have examined the impact of elections on the stock market, but the findings are not consistent. Studies on the comparison of multiple general elections and the stock market's response to the victory of the same party or a different party in India have not been done. By analysing the stock data from various selected companies, this study makes an effort to close the gap by using the event study methodology as an approach to investigate stock return during various elections.

Data and Methodology

The index data of NIFTY 50 and daily closing data of select companies (selected on the basis of NIFTY 50 and NIFTY sectoral indices; top five from each of top five sectors) was extracted from NSE website. Four Lok Sabha general elections namely 2004, 2009, 2014 & 2019 were selected for the study. The day on which the results for the election were declared was taken as t_0 (event day), the days before the results for the election were declared were taken as t_{0-i} (pre-event days) and the days after the results for the election were declared were taken as t_{0+i} (post-event days). Four event periods were considered for the study i.e., 91days (45 pre and 45 post), 61days (30 pre and 30 post), 31 days (15 pre and 15 post) and 11 days (5 pre and 5 post) for each election. Based upon standard literature an estimation period of 250 days (i.e., 250 days preceding the day t-45) was taken for calculating the normal returns. This was done to avoid any overlapping of the estimation period and the event period. The daily stock price data was extracted and converted into daily returns and then to abnormal returns using various python packages like – numpy, pandas, nsepy and linregress. After which, the data was extracted to excel and SPSS for further processing and analysis.

This study uses Market Model (MacKinlay 1997) to investigate the reaction of stock prices in response to the election results. It is considered to be the cornerstone of the event study technique by many researchers. The market model event study methodology makes the assumption that the returns on securities and the returns on market portfolios are linearly related and uses the regression coefficient to calculate the normal returns.

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To verify the assumption of the market model theory and determine if the returns on securities and the returns on market portfolios are linearly related, line fitting was done using least square method. Since the normal returns are calculated on the basis of estimation period, therefore, data from the estimation period was used for line fitting. After which event study methodology was used to analyze how the elections affect the stock returns. First, using the daily closing data, stock returns were computed. Then, normal returns for the event window were determined using regression by taking stock returns as the dependent variable and market returns as the independent variable. Finally, Abnormal Returns were calculated for the selected companies individually, which were then converted into Average Abnormal Returns (AAR) for further analysis.

The traditional paired t-test and t-statistics have been used to test the relationship between the pre-election and post-election data sets. The results were tested at 5% and 10% level of significance. T-tests can have either positive or negative T-scores. The absolute value of t-score is taken for analysis. A negative t-value denotes a reversal in the effect's directionality, which is unrelated to how significant the group differences are. A higher t-score indicates a more significant difference between the groups as it indicates that the difference in group means is greater than the pooled standard error.

Hypothesis

For the overall statistical techniques and their application and interpretation of the study, the following hypothesis hold for the entire study:

H_{10}: There exists no relationship between elections and stock market returns.
H_{11}: There exists a significant relationship between elections and stock market returns.
H_{20}: There exists no relationship between change in government and stock market returns.
H_{21}: There exists a significant relationship between change in government and stock market returns.

Analysis & Findings

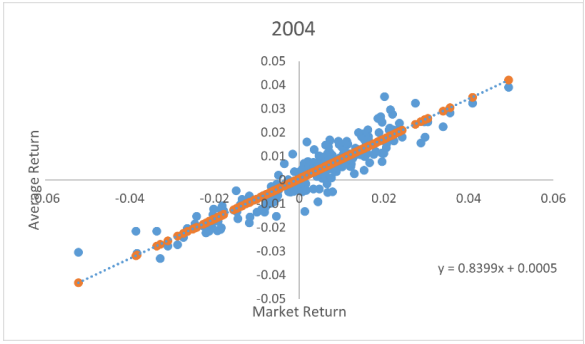

Figure: 1(a)

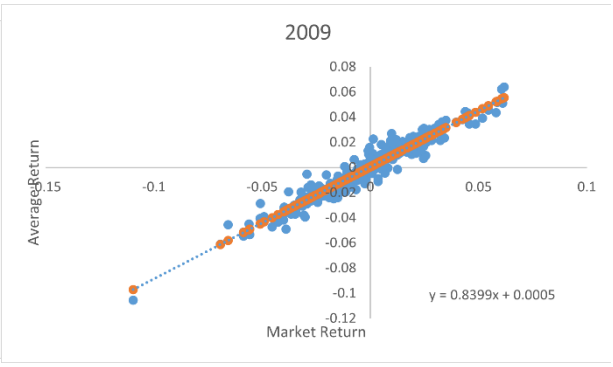

Figure: 1(b)

Figure: 1(c)

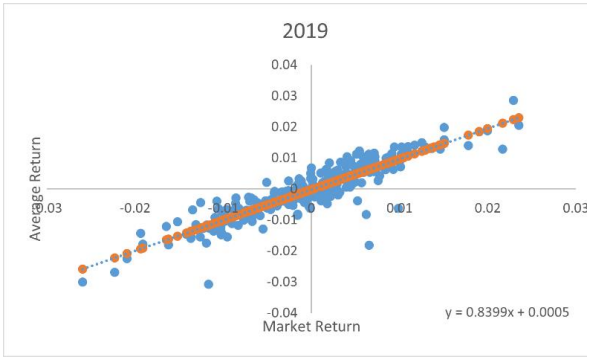

Figure: 1(d)

The above figure 1(a), (b), (c) and (d) show graph of the fitted line after using the least square method on the dataset, the RSME for the year 2004, 2009, 2014 and 2019 are found to be 0.0049, 0.0062, 0.0034 and 0.0039 respectively and R^2 are found to be 8649, 0.9291, 0.9027 and 0.81 respectively, which suggest linearity between returns on securities and the

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returns on market portfolios. The results are in accordance with the assumption that the returns on securities and the returns on market portfolios are linearly related.

Table 1 Descriptive statistics of overall AAR of various election

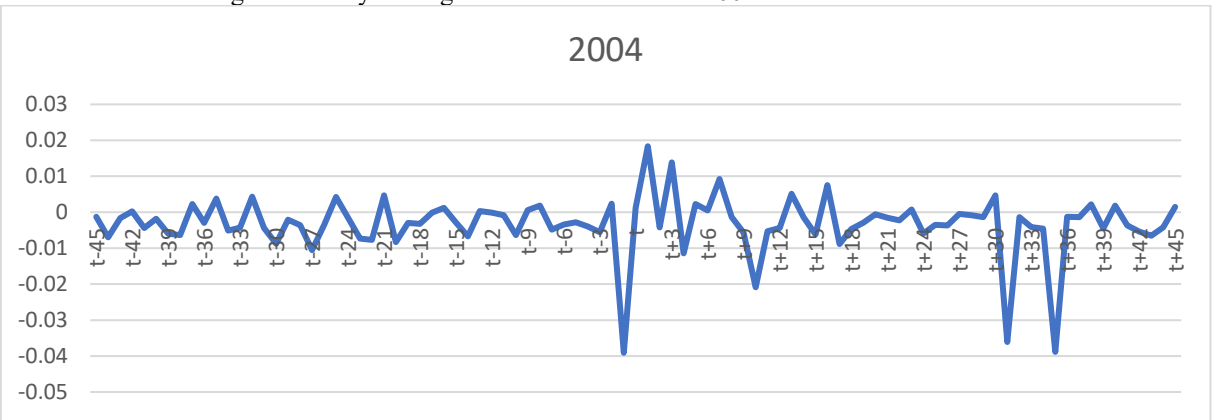
	Minimum	Maximum	Mean	Std. Deviation	Skewness
YEAR2019	-0.007760	0.007223	-0.00006436	0.008122	-0.735
YEAR2014	-0.592497	0.711326	0.06861546	0.2244151	0.088
YEAR2009	-0.017265	0.026212	0.00348071	0.0074549	0.097
YEAR2004	-0.039084	0.018344	-0.00325018	0.0082210	-2.269

Table 2: Descriptive statistics of AAR before and after the election results

Descriptive Statistics								
	2004		2009		2014		2019	
	Pre-Event	Post-Event	Pre-Event	Post-Event	Pre-Event	Post-Event	Pre-Event	Post-Event
Minimum	-0.03908	-0.03881	-0.00470	-0.02170	-0.00870	-0.01730	-0.00600	-0.00860
Maximum	0.00466	0.01834	0.00720	0.00940	0.02620	0.01720	0.00650	0.00730
Mean	-0.003456	-0.00314	-0.00017	-0.000693	0.004137	0.002797	0.000486	0.0000067
Std. Dev	0.006584	0.009714	0.00269	0.005279	0.007292	0.007717	0.003106	0.0029054
Skewness	-3.613	-1.760	0.591	-1.311	0.743	-0.406	0.127	-0.218
Kurtosis	19.436	6.282	0.285	5.059	0.817	0.190	-0.232	1.174

The above table 1 & 2 show the descriptive study of the AAR for all four election windows. The data reveals that the 2014 Election event window shows both the minimum as well as the highest average returns. It is also interesting to note that, the 2004 election window shows a very high negative skewness of -2.269 and the 2014 election window shows the highest standard deviation indicating high variation in the data. The mean AAR before and after election 2004 and 2009 found to be negative. The Standard Deviation for all the elections shows an increase after the election except for 2019 election where it shows a significant decrease indicating low variability after the elections.

Figure 2: Daily Average Abnormal Returns of 2004 election event window



The above figure 2 shows that the AAR for the 2004 election window was mostly positive before the event while negative after the event. The AAR shows a sudden fall (lowest) on day t-1 i.e., day before the election results were announced & a high jump (highest) on the t+1 day i.e., on the day after the results. However, shows a downward fall afterwards. Being lowest on day t+10, t+13 & t+35. It is very peculiar to see a high skewness of -2.269, which indicates less larger returns and more smaller losses which may be a good sign for many investors. These may be because the investors were expecting a change in the government.

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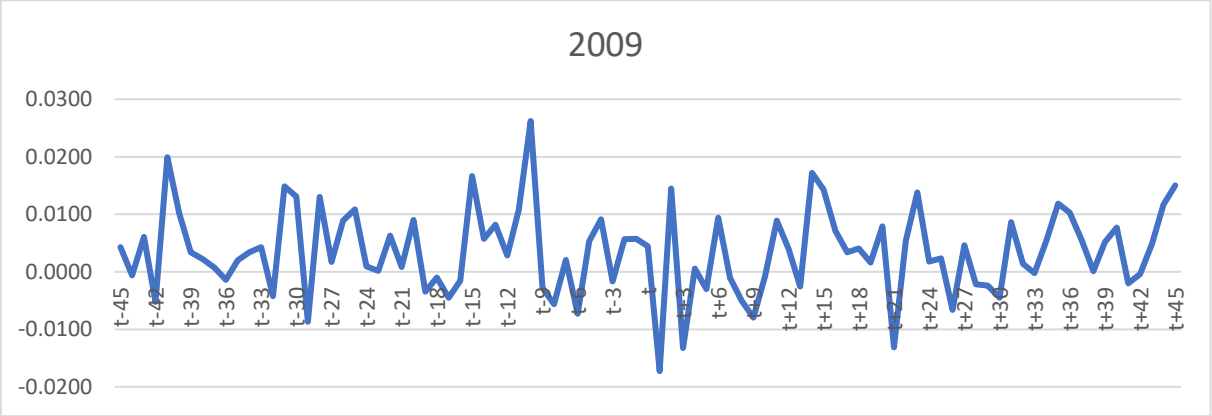
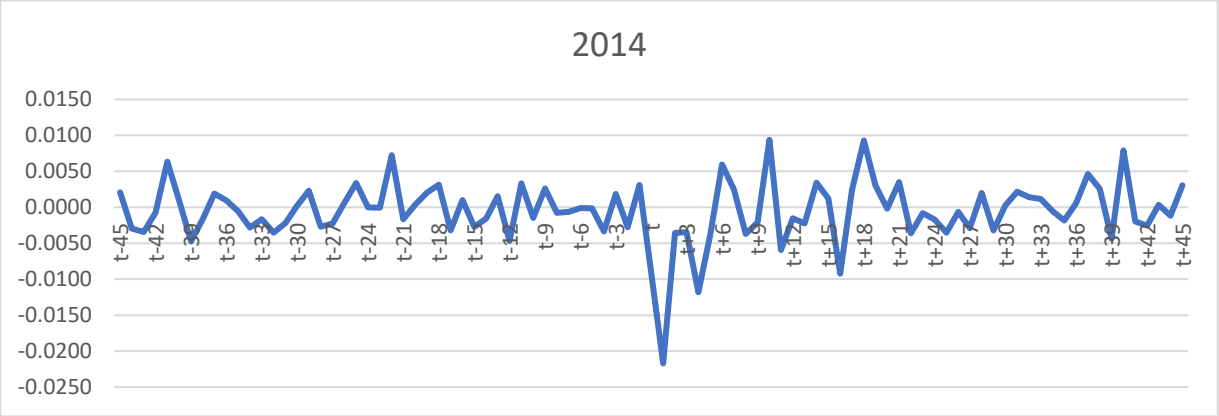
Figure 3: Daily Average Abnormal Returns of 2009 election event window



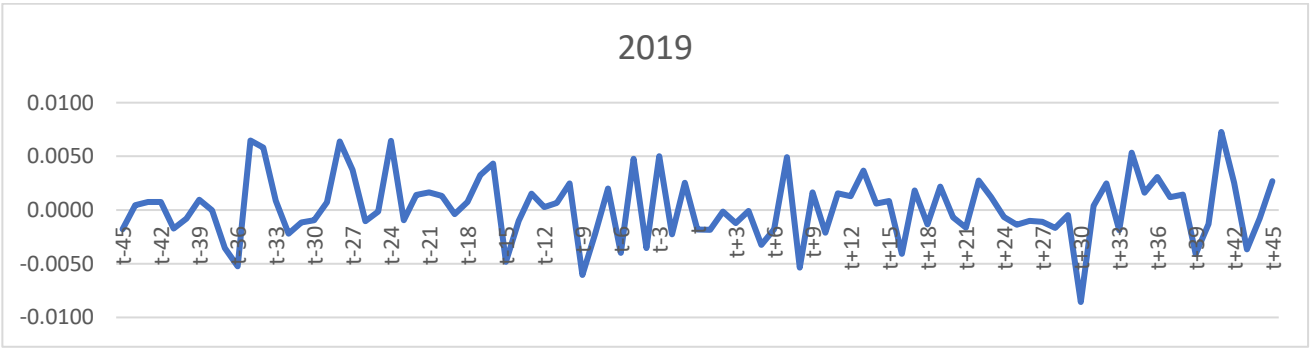
The above figure 3 shows that even though the AAR for the 2009 election window mostly stays on positive side during the event window but it keeps falling to negative in the post event window. With a skewness of 0.097 the graph shows a high distortion, which indicates more lower returns and less higher losses which may not be good sign for many investors.

Figure 4: Daily Average Abnormal Returns of 2014 election event window



The above figure 4 shows that the AAR for 2014 election window remains mostly on the negative side for near event window. It can be inferred that investors were expecting a change in government and were actively participating in stock market.

Figure 5: Daily Average Abnormal Returns of 2019 election event window



The above figure 5 shows a very low mean return in 2019 election window. It shows a skewness negative skewness of -0.735 and lowest standard deviation of 0.0081 indicates that investors were not sure about the results and very cautious while trading.

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Table 3: Daily Average Abnormal Returns and Student's t-statistics tested at 5% level of significance

	2004		2009		2014		2019	
DAY	AAR	t-stat	AAR	t-stat	AAR	t-stat	AAR	t-stat
t-45	-0.0013	-0.26669	0.0043	0.6806	0.0021	0.6071	0.000507	0.129383
t-44	-0.00698	-1.43143	-0.0006	-0.1020	-0.0029	-0.8632	-0.00526	-1.34225
t-43	-0.0016	-0.32755	0.0061	0.9693	-0.0035	-1.0123	-0.00161	-0.41011
t-42	0.000199	0.040833	-0.0053	-0.8407	-0.0008	-0.2200	-0.00535	-1.36514
t-41	-0.00437	-0.89544	0.0199	**3.1795**	0.0064	1.8627	0.001956	0.499112
t-40	-0.00181	-0.37075	0.0102	1.6275	0.0009	0.2742	0.005655	1.442939
t-39	-0.00596	-1.22256	0.0034	0.5454	-0.0047	-1.3837	0.009366	**2.389716**
t-38	-0.00633	-1.29944	0.0022	0.3585	-0.0016	-0.4701	-0.01039	**-2.65092**
t-37	0.002254	0.462408	0.0007	0.1148	0.0019	0.5556	0.001309	0.333862
t-36	-0.00294	-0.60246	-0.0014	-0.2212	0.0009	0.2766	-0.01021	**-2.60413**
t-35	0.003795	0.778431	0.0020	0.3163	-0.0006	-0.1620	-0.00615	-1.57011
t-34	-0.00513	-1.05236	0.0034	0.5438	-0.0028	-0.8247	-0.00372	-0.94915
t-33	-0.00435	-0.89212	0.0043	0.6806	-0.0017	-0.4904	-0.00172	-0.43944
t-32	0.004341	0.890415	-0.0042	-0.6736	-0.0035	-1.0402	0.00652	1.663491
t-31	-0.00442	-0.90646	0.0148	**2.3714**	-0.0022	-0.6487	0.003431	0.875377
t-30	-0.0088	-1.80499	0.0131	**2.0923**	0.0003	0.0774	-0.00578	-1.47578
t-29	-0.00204	-0.41916	-0.0087	-1.3838	0.0023	0.6756	0.005336	1.361579
t-28	-0.00358	-0.73433	0.0130	**2.0787**	-0.0027	-0.7830	-0.00425	-1.08408
t-27	-0.01055	**-2.16353**	0.0017	0.2736	-0.0023	-0.6644	0.005773	1.473063
t-26	-0.00351	-0.72046	0.0089	1.4184	0.0006	0.1764	-0.001	-0.25517
t-25	0.004213	0.864204	0.0109	1.7355	0.0034	0.9848	-0.00391	-0.99787
t-24	-0.00144	-0.29439	0.0009	0.1466	0.0000	-0.0078	-0.00408	-1.04166
t-23	-0.00731	-1.49946	0.0002	0.0290	-0.0001	-0.0157	-0.0064	-1.63261
t-22	-0.00765	-1.56913	0.0063	1.0031	0.0072	**2.1231**	0.004494	1.146677
t-21	0.004664	0.956673	0.0008	0.1330	-0.0017	-0.4842	0.014255	**3.637206**
t-20	-0.00835	-1.71247	0.0090	1.4428	0.0003	0.0964	0.001473	0.375829
t-19	-0.00298	-0.61215	-0.0034	-0.5496	0.0020	0.5967	-0.01012	-2.5831
t-18	-0.00327	-0.67127	-0.0010	-0.1605	0.0031	0.9200	0.00617	1.574225
t-17	-0.0001	-0.02103	-0.0045	-0.7222	-0.0032	-0.9494	-0.00605	-1.54339
t-16	0.001209	0.248043	-0.0016	-0.2521	0.0010	0.2969	0.002774	0.707798
t-15	-0.00282	-0.57781	0.0166	**2.6558**	-0.0027	-0.7940	0.002924	0.745985
t-14	-0.00669	-1.37305	0.0057	0.9162	-0.0016	-0.4545	0.001514	0.386297
t-13	0.000313	0.06412	0.0082	1.3079	0.0016	0.4560	0.009627	**2.456165**
t-12	-0.00016	-0.03239	0.0029	0.4560	-0.0047	-1.3797	0.008637	**2.203571**
t-11	-0.00085	-0.17401	0.0108	1.7252	0.0033	0.9732	0.011725	**2.991688**
t-10	-0.00638	-1.30935	0.0262	**4.1867**	-0.0015	-0.4301	0.004465	1.13929
t-9	0.000617	0.126547	-0.0028	-0.4421	0.0026	0.7621	0.001202	0.306578
t-8	0.00182	0.373341	-0.0056	-0.9019	-0.0008	-0.2200	0.014016	**3.576175**
t-7	-0.0048	-0.98555	0.0020	0.3252	-0.0007	-0.1913	-0.00545	-1.39134
t-6	-0.00344	-0.70653	-0.0073	-1.1623	-0.0001	-0.0337	0.005783	1.475394
t-5	-0.00282	-0.57781	0.0053	0.8524	-0.0001	-0.0400	-0.00644	-1.64268
t-4	-0.00399	-0.81832	0.0091	1.4580	-0.0033	-0.9801	-0.01137	**-2.90028**
t-3	-0.00554	-1.1369	-0.0017	-0.2655	0.0018	0.5411	-0.03599	**-9.18156**

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t-2	0.002359	0.483861	0.0057	0.9090	-0.0028	-0.8153	0.009677	**2.469093**
t-1	-0.03908	**-8.01783**	0.0057	0.9176	0.0031	0.9108	-0.0018	-0.46016
t	0.001193	0.244662	0.0045	0.7144	-0.0092	-2.7059	0.004859	1.239742
t+1	0.018345	**3.763284**	-0.0173	**-2.7577**	-0.0217	**-6.3627**	-0.01729	**-4.41153**
t+2	-0.00417	-0.85642	0.0145	**2.3114**	-0.0036	-1.0471	-0.00822	**-2.09626**
t+3	0.013898	**2.850985**	-0.0132	**-2.1146**	-0.0035	-1.0142	-0.00088	-0.22388
t+4	-0.01146	**-2.35085**	0.0005	0.0841	-0.0118	**-3.4595**	0.006052	1.544077
t+5	0.002288	0.469269	-0.0030	-0.4814	-0.0038	-1.1206	-0.00569	-1.45153
t+6	0.000542	0.111104	0.0094	1.5022	0.0060	1.7455	0.001219	0.310951
t+7	0.009266	1.900727	-0.0011	-0.1716	0.0025	0.7329	-0.01164	-2.96865
t+8	-0.00139	-0.28576	-0.0050	-0.8030	-0.0037	-1.0811	0.004801	1.224878
t+9	-0.00568	-1.16428	-0.0080	-1.2744	-0.0021	-0.6142	0.015538	**3.964331**
t+10	-0.02087	**-4.28056**	-0.0009	-0.1374	0.0094	**2.7477**	-0.00117	-0.29736
t+11	-0.00527	-1.08171	0.0089	1.4245	-0.0059	-1.7411	-0.00285	-0.72723
t+12	-0.00435	-0.89312	0.0039	0.6308	-0.0015	-0.4509	-0.00378	-0.96319
t+13	0.005141	1.054692	-0.0026	-0.4104	-0.0022	-0.6520	0.005736	1.463539
t+14	-0.00146	-0.30016	0.0172	**2.7440**	0.0034	0.9956	0.000482	0.123015
t+15	-0.00614	-1.25916	0.0143	**2.2802**	0.0012	0.3655	0.00799	**2.038649**
t+16	0.007504	1.539276	0.0071	1.1390	-0.0092	**-2.7036**	0.013075	**3.336138**
t+17	-0.00887	-1.81862	0.0034	0.5376	0.0025	0.7184	-0.00061	-0.15618
t+18	-0.00467	-0.9575	0.0041	0.6523	0.0093	**2.7234**	0.002786	0.710766
t+19	-0.00284	-0.58334	0.0016	0.2549	0.0031	0.8972	-0.01221	**-3.1164**
t+20	-0.00053	-0.10777	0.0079	1.2588	-0.0002	-0.0553	0.006773	1.728192
t+21	-0.00159	-0.32519	-0.0131	**-2.0986**	0.0035	1.0294	0.00199	0.507765
t+22	-0.00228	-0.46745	0.0054	0.8645	-0.0036	-1.0545	-0.0069	-1.76069
t+23	0.000773	0.158672	0.0138	**2.2021**	-0.0008	-0.2360	-0.00493	-1.25667
t+24	-0.00595	-1.22156	0.0018	0.2874	-0.0017	-0.5023	-0.00078	-0.20002
t+25	-0.00353	-0.72372	0.0023	0.3748	-0.0035	-1.0303	0.003689	0.941281
t+26	-0.00372	-0.76326	-0.0066	-1.0578	-0.0006	-0.1904	-0.00543	-1.38616
t+27	-0.00045	-0.09176	0.0046	0.7338	-0.0029	-0.8537	-0.00305	-0.77698
t+28	-0.00082	-0.16799	-0.0022	-0.3436	0.0020	0.5796	-0.00107	-0.27332
t+29	-0.0014	-0.28674	-0.0024	-0.3793	-0.0032	-0.9473	-0.00178	-0.45473
t+30	0.004645	0.952833	-0.0045	-0.7210	0.0002	0.0705	0.012208	**3.114888**
t+31	-0.03609	**-7.40274**	0.0086	1.3761	0.0022	0.6392	0.021619	**5.515989**
t+32	-0.00134	-0.2752	0.0014	0.2221	0.0014	0.4120	-0.00063	-0.16091
t+33	-0.00414	-0.85029	-0.0002	-0.0377	0.0011	0.3296	0.005983	1.526492
t+34	-0.00456	-0.93483	0.0054	0.8617	-0.0006	-0.1632	-0.00677	-1.72667
t+35	-0.03881	**-7.96215**	0.0119	1.8967	-0.0019	-0.5431	0.00109	0.278105
t+36	-0.00128	-0.26292	0.0103	1.6477	0.0006	0.1682	-0.001	-0.25515
t+37	-0.00135	-0.27601	0.0056	0.8881	0.0046	1.3474	-0.00613	-1.56491
t+38	0.002205	0.452313	0.0001	0.0162	0.0026	0.7590	-0.00121	-0.3083
t+39	-0.00449	-0.92048	0.0052	0.8256	-0.0044	-1.2784	0.0092	**2.347451**
t+40	0.001831	0.375538	0.0077	1.2256	0.0079	**2.3176**	0.01599	**4.079746**
t+41	-0.00365	-0.74891	-0.0020	-0.3242	-0.0020	-0.5767	0.00622	1.586992
t+42	-0.00534	-1.09635	-0.0004	-0.0602	-0.0025	-0.7437	0.001703	0.434561
t+43	-0.00654	-1.341	0.0048	0.7684	0.0003	0.0986	0.007997	**2.040334**

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t+44	-0.00426	-0.87371	0.0117	1.8686	-0.0012	-0.3411	0.000329	0.083879
t+45	0.001438	0.294995	0.0150	**2.3968**	0.0031	0.9022	-0.00341	-0.87084

The above table 3 shows the AAR and t-statistics for all the elections. The AAR is found significant for day t-24,t-1, t+1, t+3, t+4, t+10, t+31 and t+35 for 2004 election, day t-41, t-31, t-30, t-28, t-15, t-10, t+1, t+2, t+3, t+14, t+15, t+21, t+23 and t+45 for 2009 elections, day t-22, t+1, t+4, t+10, t+16, t+18 and t+40 for election 2014 and day t-39, t-38, t-36, t-21, t-13, t-12, t-11, t-8, t-4, t-3, t-2, t+1, t+2, t+9, t+15, t+16, t+19, t+30, t+31, t+39, t+40 and t+43 for election 2019. The data indicates significant returns were mostly observed after the elections, except for 2019 election, where significant returns were found both before and after the elections. The results suggest that the investors were highly active in the stock market specially, in 2019. Which further indicates that there was high uncertainty about the election results among the investors in 2019.

Table 4: Results of Paired t-test for various Event windows for each Election tested at 5% and 10% level of significance.

General Election 2004			**General Election 2009**			**General Election 2014**			**General Election 2019**		
Window	t-value	p-value	Window	t-value	p-value	Window	t-value	p-value	Window	t-value	p-value
+45, -45	-0.172	0.864	+45, -45	0.874	0.387	+45, -45	0.588	0.559	+45, -45	-0.807	0.424
+30, -30	-1.348	0.188	+30, -30	1.126	0.270	+30, -30	1.348	0.188	+30, -30	0.327	0.746
+15, -15	-1.241	0.235	+15, -15	1.279	0.222	+15, -15	1.174	0.260	+15, -15	0.384	0.707
+5, -5	-1.431	0.226	+5, -5	1.886	0.132	+5, -5	2.425	**0.072**	+5, -5	-0.897	0.420

The above table 4 shows the results of the paired t-test for all the event windows. The results for all the four elections were found to be insignificant at 5% level of significance. However, result for the election 2014 are found to be significant at 10% level of significance for short interval window (11-day window). It can be inferred that the market was affected by the change in government and the investors were expecting a change in the government.

Conclusion

The findings of the study indicate that the AAR was mostly negative during the event window. Even though the paired t-test results of event window of 2004, 2009 and 2019 showed insignificant results, the student's t-statistics for daily AAR indicate that the market was affected by the election results in the event window 2004 and 2009. The year 2014 was the year when the United Progressive Alliance (UPA), which was led by Indian National Congress lost the general election and Bharatiya Janta Party (BJP) alone won the elections by securing majority votes. The event window for 2014 election provide evidence that market was significantly affected by the election results. The market was intense and volatile during the 2019 elections, i.e., when National Democratic Alliance (NDA) led by BJP was in power leading to uncertainty in the market. The evidence is in accordance with the findings of (Wisniewski, 2016) and (Faraji et al., 2020) that suggest Regime changes are efficiently reflected in the prices of individual stocks and investors react to political uncertainties stemming from elections and transfer of power. The results also suggests that the market is more volatile during the next election, which is held after the election in which change in government took place. The study suggests that market is highly volatile during elections as such, investor should be cautious during elections and should device proper investment strategy during elections.

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