
SECTION B: BUSINESS AND MANAGEMENT SCIENCE

Stock Market Response To Presidential Election Result Announcement In Nigeria

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Abstract

This study investigates how the prices of stocks listed on the Nigerian Stock Exchange responded to Presidential elections result announcement. The daily All Shares Index was used as proxy for stock prices while the 2015 and 2019 Presidential elections result announcement were used as proxy for new information. The Researcher adopted the event study methodology and a 21-day event window was constructed. That is 10 days before presidential elections result announcement (-10) and 10 days after the announcement (+10) in addition to the event day. The average abnormal returns (AAR) and the cumulative average abnormal returns (CAARs) were computed and analyzed using the t-statistic to ascertain whether it is possible to earn abnormal return due presidential results pronouncement. The findings revealed that stock prices respond quickly to new information thereby making it difficult to earn abnormal return due to the 2015 and 2019 presidential elections results announcement.

Keywords: *Nigerian Stock market; Abnormal return; Presidential elections; Event study; Market efficiency.*

Introduction

Stock price behaviour is known for having a link with the efficiency of the stock market. This implies that stock prices are usually sensitive to new information since market efficiency is a function of how fast new information is reflected in security value. Empirical evidence shows that stock values react to information emanating from both the internal and external environment of the companies whose stocks are traded in the capital market (Gbanador, 2019). Thus, information about presidential election causes volatility in stock prices. Elections are important political event that determines the direction of future economic management. Changes in policies, which are determined by election outcomes, can influence not only consumers' welfare but also firms' profits. Because of this, it is natural for investors in the market to predict election outcomes well before election days, and the election itself is regarded as an additional factor that would impact volatility around elections (Julio and Yook, 2012). In Nigeria, Presidential election is conducted every 4 years to usher in a new government and policies. Pronouncement about presidential election as an event affects all strata of the economic system, including the stock market. The reason revolves around the likely friendly or unfriendly policies of the incoming president of a country. For this reason, while making investment decisions, investors do consider the possible influence of political event on the stock market.

Political events most especially election in developing countries increase the level of uncertainty in the stock market. When the election win is widely expected, the financial markets will behave calmly in the year beforehand (Osamwonyi and Omorokunwa, 2017). The two presidential elections of interest are the 2015 and 2019 presidential elections. The major contenders of the 2015 elections were the People's Democratic Party and the All Progressive Congress. The incumbent president during this period was Dr. Goodluck Jonathan of the PDP while the major opponent was Major Gen. Muhamadu Buhari Rtd of the APC. On the other hand, the major contenders of the 2019 presidential elections are Major Gen. Muhamadu Buhari Rtd of the APC (the incumbent president) and Alhaji Atiku Abubakar of the PDP. The body language of these contestants regarding their prospective policies is expected to influence the investors' investment decisions thereby creating increase in the level of uncertainty and volatility in stock prices. If the market is semi-strong efficient, news about presidential elections cannot serve as a veritable tool for market participant to make abnormal return since this information is already reflected in stock prices. It is expected for an efficient capital market to capture new information into stock prices such that the stock price is a reflection of its intrinsic value. By so doing, it will be difficult for an investor to use this information to outperform the market.

The implication is that investors can only earn average return on their investment if the capital market is efficient. This scenario has created the need to examine the 2015 and 2019 presidential election to test the responsiveness of stock prices to this event.

Literature review

The theory upon which this study is built is the efficient market hypothesis as propounded by Fama (1965). The efficient market hypothesis asserts that if a stock market is efficient, the price of the security is always a reflection of a fair measure of its intrinsic value.

The implication is that in an efficient capital market, all available information are captured and reflected in the asset prices. This information is usually available to market participants for free. Thus, there are enormous numbers of investors who actively compete with each other in attempts to estimate future stock prices. The efficient market hypothesis has three variants namely; weak form efficiency, strong form efficiency and semi strong form efficiency. In an attempt to investigate the stock market's response to general elections, Reddy (2018) examined the impact of General elections 2014 on Indian Stock market with special references to the stock of selected companies in Bombay Stock Exchange. The study adopted the event study methodology to capture the effect of General election result on the returns of selected stocks before and after the 15 days event window. The result revealed that the 2014 General election influenced the returns of stocks quoted on BSE. In a similar study conducted by Balaji, Kusuma and Kumar (2018) to examine the impact of general election on the stock markets in India, the t test and f test were used for the analysis while the daily returns in the stock market for short term (10 days), medium term (20 days) & long term (30 days) in pre-elections and post- elections period were used. The analysis measures the volatility, average returns and impact of general elections. For this analysis, 5 election sessions were considered between the periods of 1998 – 2014. The study concluded that election has more effect in short term, less in medium term and it diminishes in the long term after the election announcement.

In Nigeria, Osuala, Onoh and Nwansi (2018) conducted a study to examine the effect of 2011 and 2015 Presidential elections on the performance of the Nigerian stock market. The study adopted the event study methodology to analyze the data. The findings as evidence in the Average Abnormal Return and Cumulative Average Abnormal Return revealed that the 2011 Presidential election has a negative but significant impact of the performance of stocks while the 2015 Presidential election has a positive but insignificant impact on the stock market. In a similar study, Osamwonyi and Omorokunwa (2017) carried out a study to investigate the effect of presidential elections on investors' portfolio selection in Nigeria from 2003 to 2011.

The regression analysis was used to identify the effects that election could have on stock prices in the country, while event study was applied to investigate the focused effects of election event on portfolio selection in the Nigerian stock exchange. Price index for high and medium capitalization stocks were used in the analysis. The study revealed that there were low returns performance in the stock market during elections and that elections events have strong (generally) negative effects on abnormal returns for the selected companies in the Nigerian Stock Exchange. Kabiru, Ochieng and Kinyua (2015) did a study to investigate the effect of general elections on stock returns at the Nairobi securities Exchange. The event study methodology was adopted for the study. The findings from the study revealed that market reaction to election is highly negative or positive depending on the election volatility environment. The results from the Cumulative Abnormal Returns showed that the 2002 and 2013 general elections were insignificant whereas, the 1997 and 2007 election were significant at 5% level of significance. Ling-chun (2011) conducted a study to investigate how the presidential election influences the return of the Taiwan stock market.

The study utilizes the event study methodology to analyze the reaction of the stock market. The finding revealed a positive reaction over the stock market before 15 days and after 15 days of elections. Ahmed (2017) conducted a study to investigate the impact of political regime changes on stock prices: the case of Egypt. The study adopted the event study methodology, VAR and EGARCH models. The findings revealed that political uncertainty has a profound impact on the risk return profiles of almost all market sectors though with different degrees of intensity. That both price and volatility effects are most pronounced in banks, financial services excluding banks and chemicals sectors, whilst food and beverages as well as construction and materials sectors are found to be the least responsive to these events.

Methodology

The methodology employed in this study requires the selection of variables for the population, sample of the study and data collection procedure. The research designs adopted for this study were ex-post facto and the historical data research design. The ex-post facto design was used to establish the cause and effect relationship amongst the variables while the historical research design was adopted due to the nature of the sources of data used for the study. The study is more of a population study because the daily All Shares Index (ASI) which is a weighted average of all quoted stocks on the Nigeria stock exchange is adopted for the study. The study covers a period of six years starting from January 1, 2014 to December 31, 2019 which is equivalent to 1560 trading days. This duration is used because it is detailed enough to give a good result and analysis while using econometric tools. The period also covers the 2015 and 2019 presidential elections in Nigeria. The event study methodology as developed by Fama, Fisher, Jensen and Roll (1969) was adopted for this study.

The procedure for conducting an event study is as follows:

(a) Identification of an event and constructing the event window

The first of an event study is to identify the event of interest after which we constructed the event window. The event of interest is presidential election. Thus, the event window is constructed within the period of January 1, 2014 to December 31, 2019 which is the period within which the two presidential elections took place.

(b) Collection of returns data around the announcement date

The daily data around presidential election date were collected and decision about the return window was made. The determination of the duration of the estimation period and event window is subject to the researcher's discretion (Brown and Warner, 1985; Mackinlay, 1997 and Fama *et al*, 1969, Gbanador, 2021). The number of periods used in calculating the return before and after the event date were 10days before and 10days after the presidential elections.

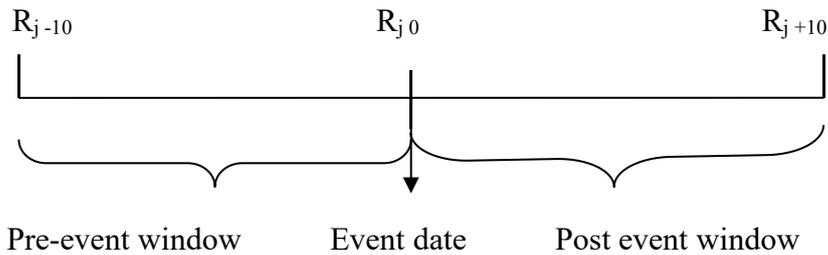


Figure 3.1: The Return window

Where:

R_j = return for the all shares index for period t

(c) Calculation of the abnormal returns by period, around the pronouncement date for the ASI.

The constant mean return model (statistical model) was adopted for this study. This is in line with the framework used by Campbell, Lo and Mackinlay (1997), Chowa, Nyannete and Mhlanga (2014), Chan-Lau (2001) and Brown and Warner (1980). The constant mean model is given as;

$$E(R_{jt}) = R_{jt} + E_{jt} \quad (1)$$

Where:

E_{jt} = the expected return of ASI at time t relative to the event (expected return)

R_{jt} = the normal return of j at time t . (actual return)

$E_{j,t}$ = abnormal return (unexpected return)

Therefore;

$$E_{j,t} = E(R_{jt}) - R_{jt} \quad (2)$$

(d) Calculate the average and the standard error of the abnormal return.

The average excess return deals with the pattern of excess return for the presidential election within the periods of study. Thus, the daily cross sectional average was used to calculate the AAR and CAAR. The implication is that for a sample of n events, the average excess return was computed using equation 3.

$$\text{AAR or } \bar{r}_t = \sum_{t=1}^n \frac{E_{jt}}{N} \quad (3)$$

Where:

\bar{r}_t = Average abnormal return (AAR)

N = period

The cumulative average abnormal return (CAAR) was also used to determine the abnormal returns. The formula for CAAR is given as:

$$\text{CAAR} = \sum \text{AAR}_t \quad (4)$$

Where:

CAAR = Cumulative Average Abnormal Return

(e) To assess whether the abnormal returns around pronouncement date are different from zero.

The test of hypothesis examined whether there is a zero Average Abnormal Return or Cumulative Average Abnormal Return at time t. The average abnormal returns and the cumulative average abnormal returns for all the trading periods in the event window were analyzed using t-test to examine whether the abnormal returns around the pronouncement date are significantly different from zero. The result is expected to reveal how the market responds to presidential election.

$$T \text{ statistic for abnormal return of period } t = \frac{AAR_t}{\frac{\sigma}{\sqrt{n}}} \quad (5)$$

$$T \text{ statistic for abnormal return of period } t = \frac{CAAR_t}{\frac{\sigma}{\sqrt{n}}} \quad (6)$$

Where:

σ = Standard deviation

n = period

If the t-statistic is significantly different from zero, then the null hypothesis will be accepted. But if the result is otherwise, it will be rejected.

Data Presentation and Analysis

The objective of this study is built on Stock market response to presidential election result pronouncement in Nigeria. The election of interest were the 2015 and 2019 presidential elections. The event study methodology as propounded by Fama *et al* (1969) and re-examined by Brown and Warner (1985) was adopted for this study. This subsection contains the tabular presentation of the data used in our analyses. The tables are labelled Table 4.1. to 4.4 as presented hereunder.

Table 4.1: Average Abnormal Return and t-test Resultfor 2015 presidential election

EVENT TIME	AAR 2015	t-stat	Sig.
-10	0.003619	0.162452	No
-9	0.006058	0.271959	No
-8	-0.0035	-0.15731	No
-7	-0.00625	-0.28071	No
-6	-0.00308	-0.13814	No
-5	-0.01076	-0.48285	No
-4	-0.00654	-0.29379	No
-3	-0.0167	-0.74985	No
-2	-0.01741	-0.78179	No
-1	-0.02172	-0.97526	No
0	-0.08369	-3.75714	Yes
1	-0.03937	-1.76749	No

2	0.021593	0.969353	No
3	0.021522	0.966174	No
4	-0.01051	-0.47171	No
5	-0.01229	-0.55169	No
6	-0.00787	-0.35308	No
7	0.003756	0.168601	No
8	0.001798	0.0807	No
9	0.003396	0.152432	No
10	-0.00537	-0.24088	No

Source: Researcher’s Computation

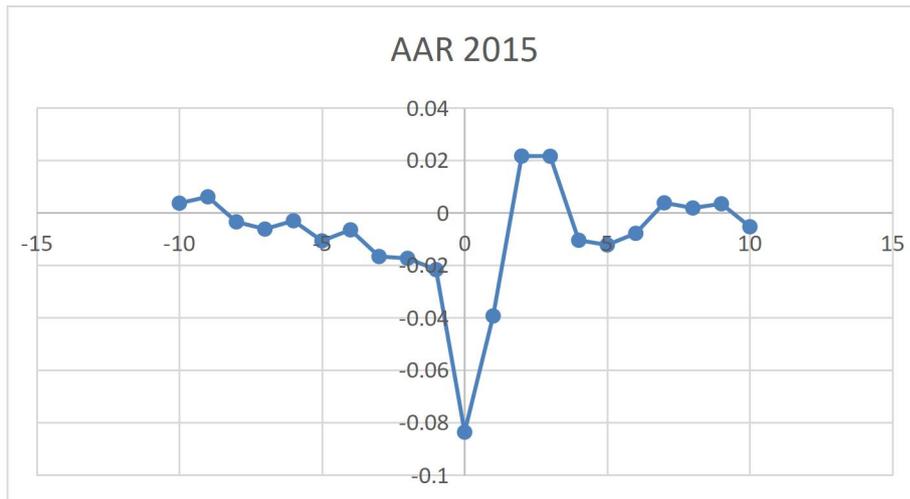


Figure 4.1: Average Abnormal Return (AAR) Graph for 2015 presidential election

Source: Compiled by the Researcher

Table 4.2: Cumulative Average Abnormal Return and t-test Result for 2015 presidential election

EVENT TIME	CAAR 2015	t-stat	Sig.
-10	0.003618754	0.043076	No
-9	0.009676861	0.11519	No
-8	0.006172757	0.073478	No
-7	-8.039E-05	-0.00096	No
-6	-0.00315753	-0.03759	No
-5	-0.01391351	-0.16562	No
-4	-0.02045794	-0.24352	No
-3	-0.03716151	-0.44236	No
-2	-0.05457646	-0.64966	No
-1	-0.07630117	-0.90826	No

0	-0.15999461	-1.90452	No
1	-0.19936688	-2.3732	Yes
2	-0.17777376	-2.11616	Yes
3	-0.15625144	-1.85997	No
4	-0.16675914	-1.98505	Yes
5	-0.17904839	-2.13133	Yes
6	-0.18691345	-2.22496	Yes
7	-0.18315772	-2.18025	Yes
8	-0.18136007	-2.15885	Yes
9	-0.17796452	-2.11843	Yes
10	-0.18333037	-2.1823	Yes

Source: Researcher’s Computation

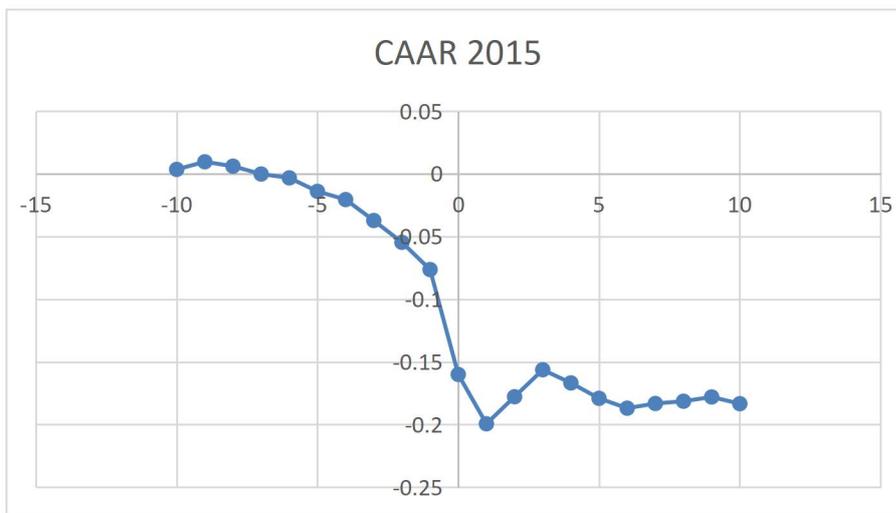


Figure 4.2: Average Abnormal Return (AAR) Graph for 2015 presidential election
Source: Compiled by the Researcher

The objective of this study is to examine the reaction of stock prices to presidential election result pronouncement in Nigeria. In order to achieve the objective, we examined if there exist a significant difference between Average Abnormal return before and after 2015 presidential elections result announcement. The result presented in Table 4.1 and Figure 4.1, revealed that the AAR before and after the event day were not statistically significant except on the event date. To affirm this result, the Cumulative Abnormal Return within the study period was examined. The result presented in Table 4.2 and Figure 4.2 shows that the Cumulative Average Abnormal Returns before the event announcement date including the event date are statistically insignificant while the post event windows result were no all statistically significant. Day 1 and Day 2 of the event window were statistically significant while day 3 was insignificant. However, the 4th to 10th day of the post event window were all significant. Although these results are statistically significant, the CAAR within these periods are all negative. The implication of this result is that new

information (2015 Presidential election result) quickly incorporates into the prices of stocks listed on the Nigerian Stock Exchange. This result is consistent with Mackinlay, (1997), Connolly and Kohler (2004), Vaz, Ariff & Brooks (2008) Fama *et al*, (196 and Gbanador (2019).

Table 4.3: Average Abnormal Return and t-test Result for 2019 presidential election

EVENT TIME	AAR 2019	t-stat	Sig
-10	-0.01991	-2.244326	Yes
-9	0.002994	0.33753969	No
-8	0.000276	0.03114854	No
-7	-0.00655	-0.7390028	No
-6	0.017555	1.97918806	Yes
-5	-0.00521	-0.5874323	No
-4	-0.00491	-0.5537518	No
-3	0.002895	0.32642159	No
-2	0.003135	0.35343407	No
-1	-0.00417	-0.4705993	No
0	0.008424	0.94971594	No
1	0.008573	0.96654077	No
2	0.017802	2.0070543	Yes
3	-0.00192	-0.2163251	No
4	-0.00801	-0.902794	No
5	0.000142	0.01606542	No
6	0.003117	0.35141737	No
7	0.00498	0.56146204	No
8	0.004176	0.47079641	No
9	0.01052	1.18603985	No
10	0.011722	1.3216223	No

Source: Researcher's Computation

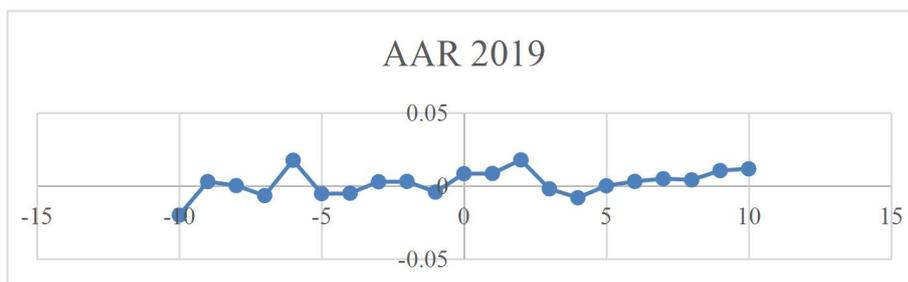


Figure 4.3: Average Abnormal Return (AAR) Graph for 2019 presidential election

Source: Compiled by the Researcher

Table 4.4: Cumulative Average Abnormal Return and t-test Resultfor 2019 presidential election

EVENT TIME	CAAR 2019	t-stat	Sig
-10	-0.019906	-1.01742	No
-9	-0.016913	-0.8644	No
-8	-0.016636	-0.85028	No
-7	-0.023191	-1.18529	No
-6	-0.005636	-0.28807	No
-5	-0.010847	-0.55437	No
-4	-0.015758	-0.8054	No
-3	-0.012863	-0.65742	No
-2	-0.009728	-0.4972	No
-1	-0.013902	-0.71054	No
0	-0.005478	-0.28	No
1	0.0030944	0.158155	No
2	0.0208964	1.068009	No
3	0.0189776	0.969943	No
4	0.0109701	0.560681	No
5	0.0111126	0.567964	No
6	0.0142296	0.727271	No
7	0.0192096	0.981797	No
8	0.0233854	1.195223	No
9	0.0339052	1.732887	No
10	0.0456276	2.332015	Yes

Source: Researcher's Computation

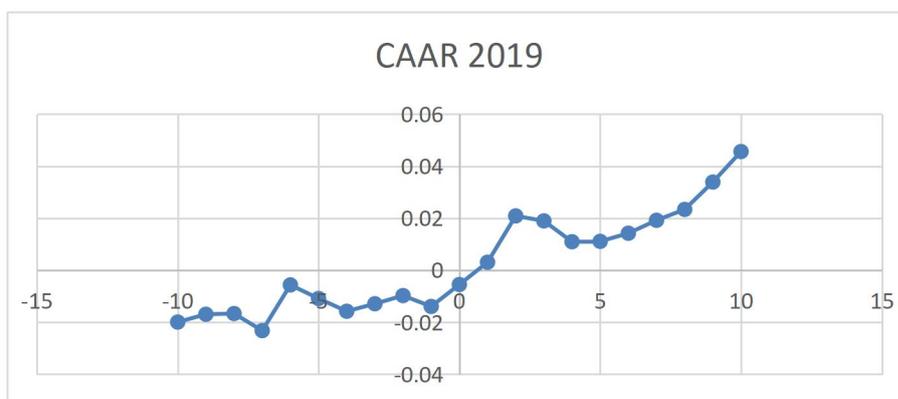


Figure 4.4: Cumulative Average Abnormal Return (CAAR) Graph for 2019 presidential election. Source: Compiled by the Researcher

Putting the 2019 Presidential elections into perspective, the results presented in Table 4.3 and Figure 4.3 shows that the Average Abnormal return before and after the event were all statistically insignificant at 5% level of significant except the 6th and 10th pre-event date and the 2nd Post-event date within the event window. The behaviour of the AAR as shown in Figure 4.3 shows an inconsistent pattern (Random walk) which is consistent with theory (see Connolly and Kohler 2004; Fama *et al*, 1969 and Kendall, 1953. To affirm this result, the Cumulative Abnormal Return within the study period was examined. The result presented in Table 4.4 and Figure 4.4 shows that the Cumulative Average Abnormal Returns before and after the event announcement date including the event date are statistically insignificant. Based on this result, it could be deduced that investors can not earn abnormal return due to Presidential elections results pronouncement. The implication of this result is that stock prices quickly response to new information (Presidential elections result) within the period of this investigation and thereby making it difficult for market participants to consistently outperform the market.

Conclusion

The speed at which the stock market respond to new information is usually used to determine the semi-strong form of stock market efficiency. It is expected that share prices will adjust quickly to new information such that investors cannot outperform the market using such information. Reckoning with the objective of this study, it will be difficult to earn AAR and CAAR due to presidential elections result pronouncement if the Nigeria Capital market reacts quickly to presidential elections result. Thus, it requires the deduction of actual returns from expected returns over the event window to get the abnormal return (see Mackinlay, 1997; Gbanador, 2021; and Fama *et al*, 1969). From the findings, the study concluded that the Nigeria Stock Market react quickly to presidential elections result within the period of study. Thus, making it difficult to outperform the market using the 2015 and 2019 presidential elections result pronouncement.

Recommendations

Based on our findings, the following recommendations were made:

1. The Federal government and other relevant agencies should encourage and sponsor capital market research.
2. The Security and Exchange Commission and other related agencies of government should keep close surveillance on the Nigeria stock market to control possible insider abuse.
3. Investors should make informed investment during election periods because stock prices quickly react to news about elections.
4. The conduct of elections should be free and fair to avoid sending the wrong signals to the stock market.

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