

**THE EFFECT OF ANNULMENT OF THE PRESIDENTIAL ELECTION
RESULTS IN KENYA ON RETURN OF SHARES AT NAIROBI SECURITIES
EXCHANGE**

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DECLARATION

I declare that this research proposal is my original work and has not been submitted for examination in any other university

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DEDICATION

To my dear lovely and devoted wife, Maua Kasuakari who has stood by me, taking care of the children and enabling me to prosecute this course under very difficult circumstances.

To my lovely children to whom I hope will derive some inspiration to be better than themselves.

ACKNOWLEDGMENT

I am absolutely indebted to God the almighty who guided me in this journey, giving me the strength and the wisdom that enabled me to scale heights I did had ceased to imagine possible.

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ABSTRACT

This study sought to find out the effect of annulment of the presidential election results on the return of shares at the Nairobi Stock Exchange. The expectation was to solidify existing knowledge regarding the dominance and imperativeness of the political events on the performance of the stock exchange. The findings of this study confirmed that annulment of presidential elections does matter, further cementing conclusions of empirical studies that aspects of electioneering such as announcement of presidential results and general events affect the performance of stock markets though with varying degrees. The outcome has confirmed the need to develop and institutionalize policies that speak to management of risks with the ultimate aim of cushioning and protecting investors and other market players from un-anticipated risks. Recognition of need to stimulate robust academic research conversations that speak unequivocally to gaps in theory and practice is an urgent imperative that seemingly has been given a wide berth for far too long particular in countries where incident is more poignant. Recognizing that perfect or complete knowledge of any issue is predicated on an examination of the 360 degrees perspective, further appreciating the interactive effect, this study by illuminating into the effects of annulment of presidential elections on return of shares, has contributed to bridging the gap between theoretical and conceptual frameworks. There are both intended and unintended consequences of any action. The persuasion to recalibrate international constructs such as trade, politics, and diplomacy, arising from the unintended consequence is neither a wandering in the dark nor an attempt to reduce otherwise serious occurrence to charades and caricatures of the political bands. While the study has demonstrated generally that events in the external environmental of the firm have material effect on the performance of shares at the Nairobi stock exchange, the finding of this study suggests that the dominance of politics in the economic outcomes as confirmed by the performance of shares at Nairobi Securities Exchange. This recognition is expected to spur further conversations about linkages and extensions of events in socio-economic impacts and outcomes. The study also has confirmed that the Nairobi Stock Exchange exhibits semi-strong form market efficiency by the way the market absorbed and reacted to the information regarding the invalidation of the presidential election result. A number of limitations to the efficacy of this study were encountered. Firstly, possibility of confounding effects associated with major events occurring close to the event date could not be ruled out, presenting an analytical conundrum. Secondly, the market model variables, though useful in predicting the market performance, could not fully account for the effects, suggesting the need for a more robust model to be employed. This problem may have been accentuated by the limitation of the tools and rigour of analysis suggesting a need for deployment other sophisticated analytical tools such as intelligent neural systems that have the ability to isolate and compute the interactive factor effects of the event. Behavioral biases by market participants could have been at play during the event timelines, and were not factored in the analytical approach. Finally the study makes suggestions for further research focusing on the need for comparative analysis in other jurisdictions where a similar event has been witnessed, broadening and deepening research objective to cover intraday activities, factor interactions including extensions to effects not limited to the formal economy but extended to informal economic aberrations so as to remedy apparent policy disconnect in the framing and execution of socio-economic policies that impact on the real economy.

ABBREVIATIONS AND ACRONYMS

AAR	Average Abnormal Returns
AIMS	Alternative Investment Market Segment
AMT	Adaptive Market Theory
APT	Arbitrage Pricing Theory
AR	Abnormal Return
ATS	Automated Trading System
CAAR	Cumulative Abnormal Returns
CAPM	Capital Asset Pricing Model
CAR	Cumulative Abnormal Returns
CDS	Central Depository Systems
CMA	Capital Markets Authority
EMH	Efficient Market Hypothesis
FISMS	Fixed Income Securities Market Segment
IEBC	Independent Electoral and Boundaries Commission
MIMS	Main Investment Market Segment
NSE	Nairobi Stock Exchange
USA	United States of America

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

A broad overview of the background, which outlines conceptual argument and context under which this study is anchored, is covered in this chapter. The statement of problem is derived from the gaps in theory and the need to test the theory being advanced namely that the annulled presidential election of 8th August 2017 affected the stock prices

1.1.1 Background to the Study

Presidential elections usher in a legitimate leader acceptable to the people. Elections are by their very nature emotive and divisive, often leading to conflicts that disrupt socio-economic order. The resultant change in a country's leadership often signals change of political and economic policies. Nascent democracies are particularly vulnerable to changes imposed by elections, precipitation risks that have a bearing on the stability and performance of firms. The well-known adage that choices have consequences is a fact that is often visited on the most vulnerable states.

Kenya has periodically held elections since independence. While most have been peaceful, the elections of 2007 caused widespread violence endangering the state. This election had a huge toll on the socio economic life of the country. Kenya's electoral systems have evolved since independence and are now well anchored and domesticated in the country's legal framework espoused in the 2010 constitution. The 2017 election is the second such elections carried out under the new constitutional dispensation. The 2013 elections were peaceful and although the presidential election results were contested in court, the petitioner accepted the outcome of the petition.

The Supreme Court annulled the presidential elections held on 8th August 2017, on 1st September 2017. The invalidation of presidential election result was one without parallel in the history of Kenya and Africa. This created shock and anxiety not just in Kenya but the world over.

Virtually no one expected that a nascent judiciary would mount sufficient courage to annul the elections. Monumental events such as an invalidation in the context of a yet to mature state, is likely to cause serious distortions in the economy and arguably could influence the behaviour of share prices, in a manner consistent with the findings of Coleman (2008), that macro-economic factors affect the performance of stock Markets. Adudu et al. (2012), holds a similar view that a corpus of factors affect the performance of the NSE. Whilst these factors are primarily economic in nature, it can be argued that a nexus exists between political events and these factors that have been empirically determined to affect the stock market performance.

Empirical findings from western countries largely confirm the existential influence of politics on the performance of stock exchange (Mackinlay 1977). It can be inferred that during an electioneering period, the economy becomes a political economy. This is evidenced by billboards politics displacing those of commercial adverts and postponement of investments awaiting stabilization of the political systems. Most government expenditure is also curtailed affecting various economic fundamentals. Politics therefore become the dominant cause and effect of economic performance as may be reflected in the prices of shares at a stock exchange.

Evidence from research carried out in the Nairobi Securities Exchange (NSE), confirm that presidential elections affect performance of shares and that the market is semi-strong efficient in absorbing or responding to new information. An apparent interest exists to find out the effect of annulment of presidential election result on return of shares at the Nairobi Securities Exchange even if it was limited only to the opportunity to calibrate appropriate responses that would mitigate any adverse effects of such an event.

1.1.2 Annulment of Presidential Election Results

A Presidential Election in Kenya is defined in line with Articles 136, 139 and 146. The responsibility for the management of elections in Kenya is vested in the Independent and Boundaries Electoral Commission of Kenya (IEBC). Its functions are spelt out in the Constitution of Kenya 2010 and in various enabling legislation. The first general election

under the new constitution was conducted on 4th March 2013, in what was billed as the most complex election in Kenya's history and indeed Africa. This election though contested in court was upheld and the litigant accepted the results. This had a significant calming effect both on economic and political turbulence that followed the disputed and violent ridden elections of 2007. The second election under this constitution was on 8th August 2017, whose result was contested in an election Petition No. 1, Raila Vs. IEBC and Others, and was subsequently invalidated on 1st September 2017.

When a presidential election is contested, it can yield two possible outcomes. Firstly it can be upheld. Secondly the result can be invalidated. It is the invalidation of the result seen in the context of Kenyan politics that could lead to eruption of violence and destabilization of the nation and economy. Previous elections in Kenya resulted in destruction of business, disruption of transportation along the transport corridor linking Kenya to the countries in East Africa and the great lakes region. Studies carried out confirm that indeed companies lost significant amounts of revenues and some international organizations opted to relocate to safer and more predictable political jurisdictions.

Attenuated risks contextualized around an unstable environment could have far-reaching implications manifesting in a country's stock exchange. The stock returns may experience some extreme form of volatility distorting completely the market fundamentals. Given that there is a nexus of political events and economic development, it is not unrealistic to presume that the markets may react unfavourably to such events.

While it is obvious that elections matter, their impact on various socio-economic variables have not given adequate recognition in scholarly discourse and appear not to be ingrained in government policies. To give such weighty matters a wide berth could be the reason conflicts attend most elections in Kenya and Africa in general where these effects are heart rending. An invalidation of an election result, particularly for an incumbent, should signal a need to examine how it would pan out in the stock exchange and in the instance of this case, reflection of share prices at the NSE.

1.1.3 Share Price Movements

Shares are instruments of value denoting the rights of ownership of a particular company. These rights are traded at a price deemed to be the intrinsic value of the firm. The price of a security is the present value of the future cash flows expected from firm's assets. Share prices are a consequence of trading decisions premised on demand and supply dynamics underpinned on resource allocation decisions. Asoft et al. (1990) contend that forces operating within the external and the internal environment of the firm influence demand and supply which turn affect the share prices and hence the stock returns. Among the patterns that have been documented is that Stock prices move as a consequence of and response to changes in the firm and operating environment of the firm.

Several studies tend to support the view that stock prices are affected by macro – economic variables. This contention is supported by Aduda et al 2012 and other proponents of rational economic theory who argue that prices are derived from economic fundamentals. Retained earnings and dividends policy invariably affect the shareholders expectations and hence the price movement. Granted that past, present and future earnings of a company generally guide shareholders expectations of dividends and capital gains, share prices move as a consequence of and response to forces that affect the socio-economic conditions of the firm and its operating environment.

While arguably, rational economic model has largely held sway in explaining price changes, it is the emergence of behavioralist that is filling gaps in explaining changes in prices of securities that appear not backed by economic fundamentals Their propositions, a subject of much research attention is that the socionomics could explain in part the apparent anomaly and contradictions in share price movements. Hadavadi et al (2010), affirm that share price movements are affected by highly interrelated economic, social, political, and even psychological factors. His seminal view is that these factors interact with each other in a very complex manner, thus it may be difficult to establish causal effects hence his suggestion for use of more complex genetic fuzzy systems to forecast price movements.

Granted long-term trends in share price can be explained by economic fundamentals, in the short run, share price movements exhibit too much volatility, suggesting apparent existence of irrational forces largely founded on perceptions rather than reality. Seemingly it is the information about these factors, circumstance and events that are likely to cause price distortions. The reading and calibration of events such as announcements and in this instance annulment of presidential elections are posited to contribute in part to price volatility, a view also advanced by Fama et al (1969). This contention is supported by studies undertaken by various scholars notably bloomfield (2002) and Brown et al (1985).

Political events in the fashion of an annulment of presidential results represent new information that a market is expected to react to and hence result in price fluctuations.

1.1.4 Annulment of Presidential Elections and Share Price Movements

Events that affect share prices could be within or outside the control of the company Makinlay (1977). Announcement of share splits, mergers, acquisition, earnings issuance of debt, additional shares and dividends are events that are within the control of the firm. Events outside the control of the firm include macro-economic announcements that have an impact on its future operations. Other events of legal or social nature affect the environment under which the stability and viability and earning prospects are predicated. Events for example occurring in the political space, depending on how investors and stockbrokers calibrate them, will determine the level, variability but also the trajectory of the share prices. Most economic research indicates that Kenya's economy is fragile and is susceptible to shock.

Presidential election is a decomposed subset in the greater supra system of the political environment, a theatre in which a multiplicity of forces interact. An invalidation being a consequential output of presidential election is posited to interact with economic variables contextualized on the price of shares. A political impasse creates uncertainty manifested in subdued consumption, investment activity, share prices and level of trading at the NSE.

At the macroeconomic level, this is reflected in negative fiscal budget, revenue collection and economic growth. It poses challenge to the development trajectory of the country. Similarly irrational biases in the market may exacerbate impact of events on the share price. Bullock et al (1970) confirm that short-term market movements are intimately related to presidential elections extending the implications that annulment of presidential results potentially affects stock price movements.

Data from the Capital Markets Authority indicate reduced, foreign direct investment for the period leading to the general election. Massive sell off by international investors fearing likely loss and possibility of loss of investment, have depressed the stock market. The wait and see attitude also impacts on economic performance as transactions become limited to only those considered critical by investors and stockholders. Significant and robust studies have been carried out in the USA focusing not only on the general elections but delving deeper into the cycles and even into the type of government and how the market is expected to react with the anticipated election of a candidate from either the left or the right, Booth (2003).

Some research has also been undertaken in Europe with regard to the type of orientation of the expected in coming government. Conclusions suggest that elections influence stock exchange. In Africa owing to lack of regularity and periodicity of elections, including low level of maturity of democracies, it has not been possible to undertake predictive studies. The electoral systems are chaotic, dynamic and unstable to permit any meaningful research and reliable predictions. There appears to be too much volatility to enable quantification and stability of parameters and variables.

1.1.5 Nairobi Securities Exchange

Sixty- five (65) comprise the Nairobi Securities Exchange (NSE), majority of them having been listed over 10 years. Since its formation in 1954 as a stock brokerage association, the NSE has undergone significant changes in size, structure and capacity. To better respond to market needs, the NSE is structured into the Main Investment, Alternative and the Fixed Income Securities Market Segments

NSE product and service offering are categorised into Equity Securities, Debt Securities and Next Securities. Equity Securities deal with ordinary shares and preference shares including Real Estate Investment Trusts (REITs).

The Debt Securities provides a debt market for trading in government and corporate bonds. NEXT is the derivatives markets facilitating the trading of futures contracts and was established to meet need for wider market and to address concerns of share price volatility. (Www.nse.) In an attempt to match capital markets in developed countries, in 2004, introduced the Central Depository Systems (CDS), Further improvements was made through the adoption of Automated Trading system in 2006 while Broker Back Office System was incorporated in the NSE in 2011. This latest system is designed as an interface between the ATS and the CDS.

The NSE has developed share indexes to provide better information about the market performance. The All Share Index, NS -25 and the NSE-20 are based on weighted market capitalization and price weight index respectively calculated as the mean of the shares of the public quoted firms. In the case of the NSE -20 Share Index, firms for inclusion are selected based on a weighted market performance measures in the ratio of 40% Market Capitalization, 30% Shares traded, 20%, Deals/liquidity and turnover of 10%, conditional on a unrestricted float and high profit and dividend pay out record.

The NSE has continued to play a crucial role in capital mobilization not just for firms listed in the stock exchange but also those desiring to cross list in other Exchanges like Johannesburg, London and Rwandan Securities Exchange. The expansion of the market to include bonds and derivatives will spur the market to play a critical function in the capital markets and the economic development. The NSE is part of the wider socio – economic complex systems that operate in the Kenyan market space. As a result of various linkages and interdependencies, occurrences in other sectors invariably have a bearing on its developments. More crucially as argued by Coleman (2008) in a study involving Ghana Stock Exchange concluded that stock exchange is a mirror of the economic state. Socio-economic development if Kenya appears to have symbiotic relations with the management of politics.

1.2 Research Problem

Events in the external environment present opportunities and threats to a firm in any industry, Ansoft (1990). General elections and in this instance an unexpected annulment of presidential results constitutes a threat to market stability which according to Druker (1980) degrades the substratum upon which success and sustainability of the business is built. Unfavourable conditions present a pricing conundrum; a view alluded to by Kidwell (2007), which contends that variability of earnings and failure to forecast correctly future pay-off triggers a set of reactions with often-profound effect on the financial performance of a company by causing revenue expenditure mismatch. Saunders (2011) et al, observe that extent of variability imposes constraints and risks that affect the credit standing, liquidity, value of company and investment projections.

Predictably, when organizations face a discontinuity, they respond in a variety of ways. Druker (1980) argues that modern organizations are characterized by crisis, surprise, sudden and rapid changes, and confusion including matters that may be out of control that prevail in a complex world. Panic, paralysis, incongruence and sub-optimality may be natural reactions and yet as Thayer (2013) asserts, survival largely depends on how they easily learn, prepare, manage and adapt under extreme set of unforgiving circumstances and chaos. When key actors are disparate, intervention protocols are likely to conflict and are delineated from established instruments such as strategic and operational plans and therefore as contended by as Owen (2002), lead to sub-optimality.

Arguably, shocks in the fashion of invalidation of a presidential election in an emotionally charged socio-political environment, could be sufficient to catalyse multiple ways to re-calibrate political, and business paradigms. An unexpected jolt can present significant market disorientation, resulting in either positive or negative market reactions as attested by Menge et al (2014), Kabiru (2014), and Murigi (2009). Evidence from New York Securities Exchange; indicate that the Election of Trump reinvigorated the market.

Sometimes an election of a particular candidate can have a muted reaction indicating that the market is not excited about the candidate for reasons of lack of economic transformative agenda, or inability to change the market fundamentals, Leblang et al (2004).

Most of the research conducted have confirmed that some aspect of the elections, affect the share prices and volatility of the stock market. The findings though inconclusive, however seem to concur albeit to some extent that each election is different with its unique set of characteristics, perhaps arising from differential context and issues at play. Evidently, complete knowledge is predicated on 360degree perspective. An invalidation of a presidential election of an incumbent, who had hitherto been declared a winner, constitutes a different strand within an electoral process, existence of which warrants a study if only to complete the circle of knowledge. Further this strand, though rare but provided for in most jurisdictions nevertheless is a possible outcome.

Given that invalidation is a recent phenomenon in Kenya, and coupled with the fact that no known research on this special feature has been carried out, therefore merits a pioneering study not only anchor foundations for future research on this aspect of an electoral process but also to extent the academic discourse on the nexus between political events and economic development giving an indications on the economic health of the country.

Prior to the invalidation of the result, widespread violence had been reported. The violence subsided as the country awaited the ruling on the petition filed challenging the announcement of the presidential result. Annulment of election results, heralded as unprecedented and only the fourth ever in the world, could have had significant impact on how the market digested this information and calibrated their reactions. Several concerns arise when a presidential election is invalidated. Would invalidation become a cause of worry or provide a calming effect on the fears that often translate to a vote on the NSE owing to the nexus between, economics, politics and financial markets? No known research has been carried out on the effect of invalidation of a presidential result.

This research therefore aimed at bridging this gap by seeking to answer the question, what is the effect of the annulled presidential result on the performance of shares in the Nairobi Securities Exchange?

1.3 Research Objective

To determine the effect of the annulled presidential election results on the returns of shares at the Nairobi Securities Exchange

1.4 Value of the Study

This study is expected to assist investors in making appropriate investment decisions on the backdrop of political imperatives such as annulment of presidential results. Analysts will better appreciate magnitude of the possible adverse effects, and consequently take appropriate intervention measures to minimize variability in the value of their investments.

This study expects to reinforce the need for the government to formulate policies to preempt and target possible fallouts likely to herald presidential elections. Recognition that possible effects have widespread contagion effects affecting even international community; will enable the government to take measures to address concerns of international investors who are likely to shy away from investing in unstable jurisdictions.

The study is an additional repertoire of knowledge on the effects of political events and performance of shares, thus bridge an evident gap between theory and practice particularly in less than mature stock exchanges like the Nairobi Securities Exchange.

The findings of this study could stimulate further research on extended interventions of a multiplicity of variables affecting the economy, using more rigorous analytics than provided for in this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed related literature on theories that underpin performance market arising from events in the external environment. These events are perceived as threats or opportunities. The political environment affects the economic dynamics of a country due to risks associated within the context. It is an established fact that prices are context sensitive. The volatility in the share prices is often associated with turbulence in the operating environment of firms. Investors are driven not only by the economic fundamentals but also by the perceptions about the market. These views are sometimes not rational but may be sufficient to drive prices of certain shares in a particular direction.

An examination of empirical literature provides a framework of establishing the gaps in the area meriting research attention. This proposed study will be anchored on the theories articulated below.

2.2 Theoretical Review

The theories of financial and capital markets, in which long term- finance is raised through issuance of shares, debt and other financial instruments such as derivatives, underpinned this study. These financial instruments are traded in secondary markets otherwise known as securities exchange. Existence of opportunity and efficiency are conditions precedent to smooth the transfer of value through the stock exchange. Pricing efficiency rests on the view that all available information about a firm's prospect is fully and rationally incorporated in the security prices.

2.2.1 Efficient Market Hypothesis

The theory and practice of investment is anchored on the Efficient Market Hypothesis (EMH) advanced by Fama 1985, and expounded by many other scholars. The theory asserts that markets are efficient when all available information is incorporated in the price. A fundamental assumption underpinning this theory is that optimal and rational

investment decisions are made by market players. Implicit in EMH, is that not everyone must behave rationally or is well informed, neither does it require all people to use all information in forming their expectations nor does it require the prices to be correct. Ross (1987), contends where there are no arbitrage opportunities, a market is deemed efficient since all available information is captured in the current price of shares.

EMH is seen to hold under three categories of market efficiency. Under the weak form, the all past information price incorporated whereas in the semi-strong form. The price includes all information available in the public domain. For the strong form efficiency however, all information is reflected in the security price. Markets that are strong form efficient must by necessity be semi and weak form efficient as well. The converse is not true.

The efficiency of the markets can be tested under these levels. Findings from many researches undertaken reveal that prices seem to move randomly, implying absence of systematic correlation. Cunningham (1973) found stock prices in the London Securities Exchange exhibited weak form efficiency. The focus of tests on semi strong form efficiency has largely dwelt on the direction, magnitude and speed at which new information actually impacts on the price. The general conclusion is that stock markets are semi-strong form. Conclusions from the various researches in the stock exchange indicate that only public information seems to be incorporated in the share process. Insider traders have leveraged their access to private information to make abnormal returns, but because insider trading is deemed illegal and unethical in most jurisdictions, their impact has not been large scale to alter the efficiency of the market. Consequently most markets are not strong form efficient.

The study is underpinned on the idea of capital market efficiency. In this context the capital market refers to a market where long-term finance is raised through shares, bonds and financial derivatives. Country and industry risks can alter opportunities protocols. Failure to manage exposes firms to financial uncertainty and consequences detrimental to creditors, shareholders and investors, who often lack ability to transfer risk and are confronted with information asymmetry.

2.2.2 Adaptive Market Hypothesis

Under the Adaptive Market Hypothesis (EMT) market forces rationalises and normalises prices, implying irrational behaviour has negligible impact on financial markets. Market forces are deemed to exert powerful influence to override bias in investment decisions. Examples exist of how various markets crashed real estate bubble as well as collapse of fixed income hedge funds. These events lend credence to the view that sometimes forces of irrationality or other existential matters cannot oust irrationality domains.

Consequential to real effects of emotions on quality of decisions and its capacity to dethrone clinical mental framing, underscores a need for a credible evolutionary alternative to the efficient market hypothesis, a view seemingly advanced by many authors including Farmer and Lo (1999). An evolutionary perspective presents the view that behaviour is not intrinsic but adapted to natural environmental settings through a process of natural selection, negating the neoclassical postulates of individual's utility and rational expectation maxim.

Adaptive Market Hypothesis is predicated on the concept of an individual's predisposition to learning, adapting in ways designed to secure own best interest. Instructively, taking cognizance that adaptation and innovation is largely driven by completion in ways shape market ecology with evolution determining the dynamic of the market.

Market efficiency is dynamic and context dependent and arbitrage opportunities are absent. This contrasts sharply with Adaptive market efficiency, where behavioural biases exist, equilibrium is unattainable and that risk preference is in a state of flux. Crucially important is that forces of natural selection act continually to reshape the market. Consequently previous price path and levels influence market price trajectory.

2.2.3 Capital Asset Pricing Model

The dominant theories that continue to influence investment performance are the Modern Portfolio Theory and the Capital Asset Pricing Model (CAPM) advanced by Markowitz (1952) and Sharpe (1964) respectively. The relationship between return and risk underpinning the Capital Asset Pricing Model a relationship is depicted below;

Expected return = Risk free rate + Risk premium

$$R = R_f + \beta (R_m - R_f)$$

Where R is the expected return

R_f is the risk free rate

R_m is the market return

β Is the beta being the systematic risk

As a ceteris paribus model, CAPM holds true within a distinctive set of assumptions largely unrealistic in the real world. The assumption that all assets are perfectly divisible and priced perfectly in a competitive market, or that investors have homogeneous expectations about asset returns is a fallacy. It is an affront to reality to further assume the absence of market imperfections such as taxes, regulations or restrictions on short selling. CAPM is a single factor and a statistical model defined only at equilibrium and fails to explain how market moves to equilibrium.

2.2.4 Arbitrage Pricing Theory Model

Arbitrage Pricing Model is an extension of CAPM that specifies returns as a function of more factors, which can be modelled as a linear function. (Roll R, & Ross, S. (1980). It predicts, "Asset prices should equal the expected end of period price discounted at the APT rate". This allows an investor for instance to predict the value of the stock after considering various applicable macro-economic conditions.

Arbitrage Pricing Theory Model, relaxes the restrictive assumptions of CAPM. APT rests on three key assumptions, namely that the market not only disallows arbitrage opportunities but has a factor structure with many assets. These assumptions allows for risk diversification for in equilibrium, the market compensate only un-diversifiable risk

APT works well in a conditional setting i.e. with certain information by market participants, they make investment decisions premised on conditional distribution of assets. A market is neither stable nor efficient where arbitrage opportunities exist. Hence weak form efficiency persists where no arbitrage exists.

$$R_i = ER_i + \beta_i f + \epsilon_i$$

While APT provides damning evidence against CAPM, it does not lead to the conclusion that itself provides parsimonious explanation of risk premium.

2.2.5 Behavioural Finance Theory

It is contended that perfect Knowledge is predicated on a clear understanding of the 360 degrees. To know that one has a right hand; it is all because he is fully aware of the left hand. It is possible to philosophise regarding the rationality of irrationality as a central basis for behavioural finance, which now emerging as an alternative to established finance theories as is advanced by Fama et al. (1969). Behavioural finance theory casts doubts on markets being necessarily information efficient. Biased irrational investors can alter market fundamentals permitting informed traders to earn excess returns on account of incorrectly priced securities.

Behaviour Finance paradigm suggests that investment decision are influenced by psychological and emotional factors. Departures from market rationality consequential to behavioural prejudices are expanding pervasively under conditions of uncertainty to human decision-making often leading to undesirable outcomes. Bias, loss aversion, which is predicated on attitude towards risk and return often get in the way of correct calibration and reading of risk and decision-making. An investor who is sensitive to loss fears loss. Problems of inertia stand in the way of prompt action. An investor with losing

position shows a strong desire to redeem lost ground. They would sell quickly to lock in the gain and hold on to losing investment with the hope of a turn around. Inertia is a confounding effect in decision making owing to uncertainty. People just procrastinate and do not take delay taking any action at all adopting a wait and see attitude.

Investors make irrational forecasts of future earnings, ascribed to overly optimistic or pessimistic tendencies to fortify existing price trends. Cognitive biases can explain in part price anomalies. Fear and regret lead to cognitive dissonance. Further scholars in the field of psychology have argued rightfully, that heuristic by way of representativeness, availability, anchoring and adjustment affect the way investors make decision. Overconfidence, fear and regret have been suggested to affect the decision making process. Investors also tend to over or under react to information creating unrealistic price movement. Ample empirical evidence exists to suggest irrationality in judgement by investors.

In analysing the footholds of theories of effect of stock prices using event studies, consensus in finance seems to be emerging that movements in the stock prices can be explained by conventional finance theories and emerging behavioural finance theories. (Birau 2012) researching on the impact of behavioural finance on stock markets found that financial investors do not exhibit rational behaviour partly explaining anomalies in the market. This however contradicts a view held by Bloomfield (2006) who argues that no behavioural alternative will oust markets theory because the psychological forces are exceedingly complex. Evidently, from numerous empirical studies, biases in human judgement and decision making, tend to explain investor behaviour and market anomalies.

2.3 Determinants of Stock Returns

The determinants of stocks returns have for a long time continued to be a subject of research interest against the backdrop of the need to enhance shareholders wealth. What is indisputable is that factors affecting share prices are context specific and sensitive Ansoft (1990). Forces operating in the external and internal environment of a firm

influence not only magnitude and directions of stock returns. Broadly these forces can be categorized as below,

2.3.1 External Factors

General economic conditions, political climate, government stability, legal environment, sector business prospects, technology, availability of input factors influence the profitability prospects of firms which in turn determine eventually the share price as confirmed by Coleman (2008), and Hakan (2011). Similarly issues at the near external environment such as degree of competition, monetary and fiscal policies determine not only the firm's prospects but also how the company might deal with retained earnings and dividend as identified by Gupta et al (2008). Several studies as Aduda, et al. (2012) allude have tended to conclude that macro –economic variables determine the prices of securities.

Similarly, inflation pressure affects disposal income and has a negative influence on behaviour of stocks prices driven on the backdrop of level of economic activity. Gatua (2013) holds the view that money supply, fiscal policies and the rate of interest, all work to determine the supply conditions. There is consensus that most markets are uniquely different and display varying degrees of the impact of these forces. However, speculative tendencies have the propensity to disrupt global trade, stability of exchange rates and international credit ratings. The import as argued by Kidwell et al (2007), could result in capital flight, alteration of market preferences that could precipitate a witch from securities to money markets. Additionally availability of bonds and derivative market products also affect demand and supply dynamics of stocks at a stock exchange

Social factors have a bearing on how the economic performance is perceived. Hakan (2011) contends that a nexus exists between politics and economy. Shock distorts, demand, pricing and creates unforgiving uncertainties which affect the value and revenue flows. It is expected as argued by Stratman (1999), that within such context, most investors would postpone their investment plans adopting a wait and see attitude till there is a political settlement. Politics and elections do matter in the determination of share prices as alluded to by Obradovic et al (2014) and affirmed by Furio et al (2011), who

contends that stock market performance is affected by politics. Bloomfield et al (2002), hold the view that major political change affects stock market volatility.

2.3.2 Firm Specific Factors

At the firm level, determinants of share prices have also been settled empirically. Policies and governance issues have been identified as factors that not only drive firm performance but also stock prices Henisz (2000). The past, present and future earnings as argued by Keith et al (2009), guide prospects of investors regarding capital gains and dividends. The retained earnings which is an internal source of capital financing influences future earnings prospects and consequently affects the stock price. Firm specific factors constitute a number of interconnected variables ranging from management concerns, size, capital structure and other internal financial fundamentals.

2.3.3 Announcements

When a market becomes aware of unexpected event, the share prices as Fama et al. (1969) contend, changes in response to this new information. Several studies conducted show that major Political events in the fashion of an annulment of presidential results represent new information that a market is expected to react to. Share splits, consolidation, privatisation, mergers and acquisition, spin-offs are some of the activities within the company that affects how investors view the firm and consequently the stock prices. The size of the company, quality of management, governance systems affect the prices of shares, activities of investors. These views are shared by Omutunde et al (2002) and alluded to by Saunders et al (2011).

Pletcher et al (2010), argues that the securities market has greater latent effect than established generic economic parameters in determining political outcomes. In this regard the market being a gauge for social disposition constituting the aggregation of societal “unconscious levels of optimism and pessimism” provides a strong correlation between political effects and markets dynamics.

Shohrab (2009), found that information about retained earnings and dividends determine price movements. Additionally, security returns is determined by Information asymmetry, dividend clientele effect, price lags and earnings ratio. He argues convincingly that it is the signalling effect of changes in these variables that drive price movements and consequently stock returns. Anticipated changes in company status could potentially tilt the price and cause volatility in prices. As contended by Black (1976), difference in actual and expected dividends pay out could alter dividend yield and stock returns in ways that make the picture regarding dividend to be fuzzy and puzzling with prices that simply do not add up. Granted that past, present and future earnings of a company generally guide shareholders expectations of dividends and capital gains, share prices move as a consequence of and response to forces that affect the socio- economic conditions of the firm and its operating environment.

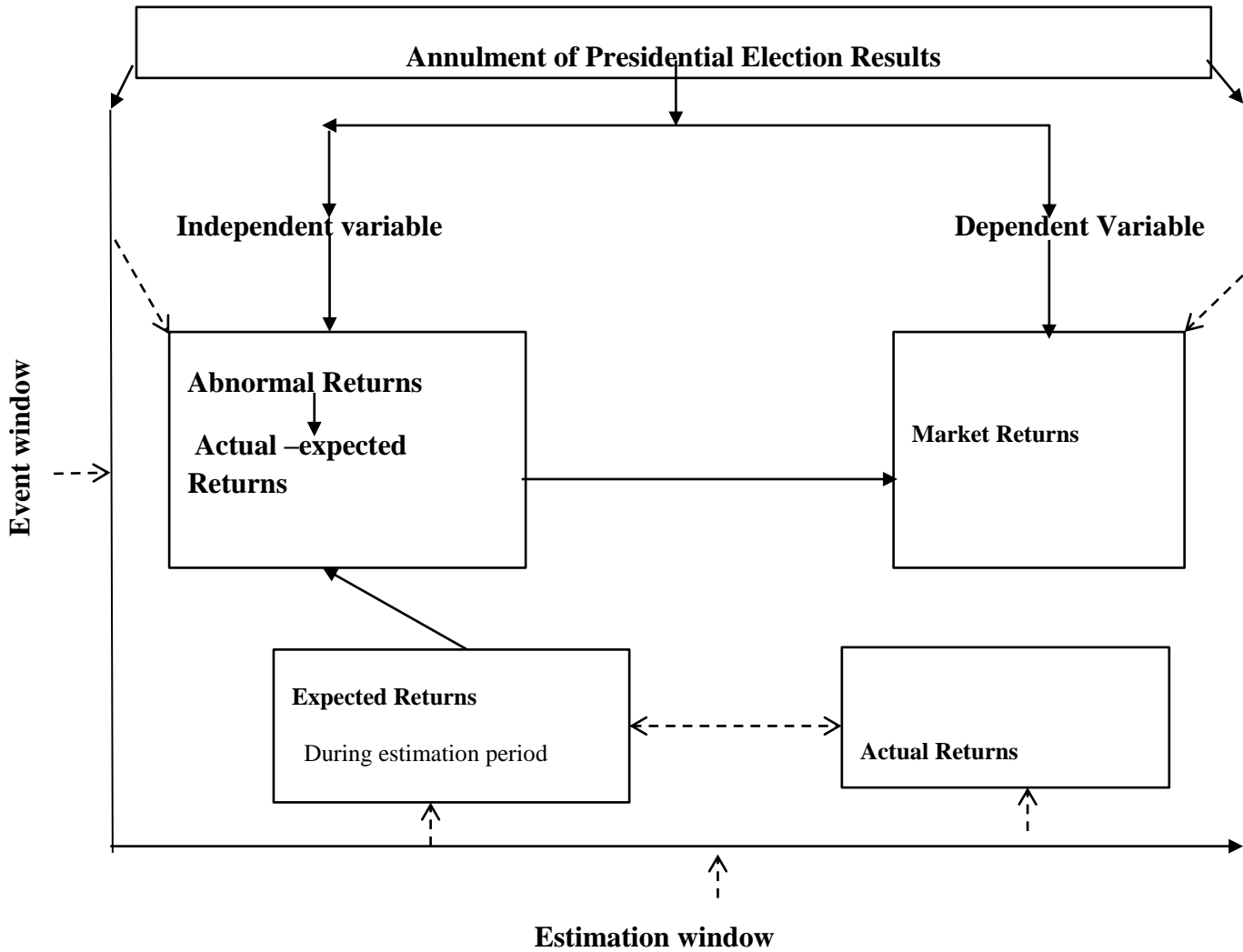
Hadavadi et al (2010), in his seminal view contend that economic, social, political, and even psychological factors interact with each other in a very complex manner making difficult to establish causal linkages. He consequently suggests the use of more complex genetic fuzzy systems to forecast price movements, as other tools seem deficient. Shangkun et al (2010), hold the considered view that other than stock data, human factors significantly impact stock movements. Sees stock price movement as accumulation of individual behaviour which is related to technical factors and trading volumes.

Noise traders can affect prices even when there is no uncertainty about fundamentals. Collective shifts of opinion of noise traders increase the riskiness of the returns to assets. Fluctuations of markets movements cannot be attributed to news about future dividends and discount rates. Noise traders bear more fundamental risk and hence earn more returns, thus causing prices to be more volatile. As argued by De Long et al,(1990), the unpredictability of noise traders future opinions deter arbitrage, prices can diverge significantly from fundamental risk. Noise traders create their own space, thus explaining various market anomalies. This seemingly agrees with excess volatility hypothesis, argues that stock prices exhibit too much volatility to be justified by fundamental variables.

2.4 Conceptual Framework

The conceptual framework depicts the relationships of the variables of interest with the dependent variable being the abnormal returns and the independent or explanatory variable being the market returns

Figure 1: Conceptual Framework



These variables are examined for the effect of the annulment of the presidential election on stock returns by determining the abnormal returns within the event window.

The expected returns are computed during the estimation period. The securities return is explained by analysing the abnormal returns during the event window. This is computed by deducting the expected returns from the actual returns using the market model.

2.5 Review of Empirical Evidence

A critical review of the relevant empirical literature confirms that the performance of the stock exchange is affected by macro socio-economic factors. During an election period, the nexus of politics and economics become more apparent, suggestive of an exhibit of components of a political economy. This view is shared by Herbs et al, (1984), who contend that stock prices may reflect consensus expectations of government economic policies and political rhetoric. Booth et al 2003, confirm that stock returns in US exhibit presidential patterns, further lending credence to the view that politics tend to play a dominant view in economic matters and by proxy performance of shares in a stock exchange.

Further evidence is adduced by research carried out by Dopke, et al. (2005,) who found weak evidence of political process in the German stock market. Huang, (1985), in a study of common stock returns and presidential elections, found strong evidence to support the notion of political control of the economy. It would not be beyond expectations that this phenomenon is a common denominator in most economies and by extension their respective stock markets. Reich et al. (2013), further reinforces this view finding scant and mixed information regarding the effects of political variables on returns and volatility on aggregate stock prices. Bullock et al (1970) confirm that short-term market movements are intimately related to presidential elections

Brown et al. (1988) contends that stock return volatility increase following arrival of unexpected information. Implicit in this view is that short-term market movements are intimately correlated with political events and presidential election. Further related evidence is adduced from Huang (1985) to support the semi strong form of market

efficiency predicated on arrival of new information such as an announcement of presidential results.

In Kenya, a study by Irungu (2011) found existence of a strong relationship between election results announcement and stock performance. Miya (2007), investigating stock market behaviour around the elections of 1997 and 2002, observed that stocks reacted strongly to election outcomes with temporal elevated levels of volatility. In both elections, he did not find abnormal returns to be statistically different.

Murigi (2009) found abnormal returns to be positive before an election takes place and negative afterwards for the elections carried out in 1997, 2002 and 2007. This compares well with the finding of Kabiru (2014) that the market reaction to an election is highly positive or negative depending on the election being analysed.

Chege (2011), while considering reactions to the market by the announcement of presidential election results for successive elections from 1997 through 2013 in Kenya, found contradictory results. Markets performed poorly after the announcement for 1997 but performed better in 2002 and 2013, suggesting a possible linkage to favourable regime change. These findings are in consensus in the research carried out by Menge et al (2014) and Irungu (2011).

2.6 Summary of Literature Review

A review of the relevant literature reveals that the main thrust of the research have focussed largely on effect of macroeconomic factors in the stock exchange. In the USA and in Europe to a limited extent, the research has focussed on the effect of presidential elections and presidential cycles including the possibility of effect of type of party or individual political persuasion on the performance of stock exchange Huang (1985) and Furio et al (2011). Scanty information is found in Kenya on political effects on the stock exchange.

Granted, as alluded to Omutunde (2012) and Adam (2014) that risks impact on variability of revenues and returns, components of share price determination, a fault line as argued by Diebold (2008) is in ignoring the compulsive forces premised on fear, adversity and

influence of governments and the combined constraining power play, culture and social and national inclinations forces that are pronounced in an election and compounded in an invalidation of an election result. Arguably as suggested by Ansoft (1990), these socially inspired factors serve to mitigate any dominating economic imperative seemingly agreeing with Shawa (2011) that development is adversely affected by political instability. A similar view is advanced by Coleman (2008) who argues that perception of destabilization of government through unconstitutional means and eruption of domestic violence will have adverse effect on investment.

The literature confirms that the dominant theory is the market model premised on market efficiency. Authors such as Crossman (1976), and Crossman and Stieglitz 1980, argue that perfectly irrational efficient markets cannot exist, as no incentive would be present. Eventually markets would collapse in the absence of reason and motivation to trade. Bloomfield (2006) on the other hand observes, “Psychological forces are far too complex in behavioural theories to oust parsimony and power of efficient market theory”. It is for this reason that the market model is the preferred model for analysing the effect of the event in question on security returns.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This Chapter discusses the research methodology of the proposed study. It examines the design that is deemed appropriate and proposes enhanced analytical tools to aid the intended research to bring out any salient features, associations and correlations.

3.2 Research Design

This study adopted Event Study Design methodology in gathering data on effects of annulled presidential election on the changes of prices of shares listed in Nairobi Stock Exchange. This methodology measures the extent to which an unforeseen event has on the expected profitability and risk of portfolio of the firm associated with that event. Event study design methodology is underpinned on efficient market hypothesis espoused by Fama et.al (1969) which states that “ the price of a security is the present value of the future cash flows expected from the firm’s assets and at any time reflect all information about the firm’s current and future earnings”. Consequently the “change in price of security after the event relative to the pre-event price reflects the market unbiased estimate of the economic values’ as asserted by Brown and Warner (1985).

3.3 Population

The population of the study is defined as the entire set of cases or units about which the research wishes to draw conclusions. In accordance with the research objectives, the population for this study is the number of firms listed at the Nairobi Securities Exchange.

3.4 Sample Design

In order to obtain information about an entire population, a sample, which is a subset of the population, was used. While there are many perspectives of a sample design, purposive sampling design is seen as most appropriate for this study. This design permits

the gathering of information relevant to the research objectives (Mugenda & Mugenda 2003)

In this research context, the sample population comprised all the companies forming the NSE-20 share index. These firms actively trade and are the most capitalized. This index is periodically reviewed to reflect the true state of market.

3.5 Data Collection

Secondary data was collected from Nairobi Stock Exchange, which consisted of daily quoted stock prices for the period under review namely 2nd June 2017 to 30th November 2017

3.6 Data analysis

Descriptive statistics were used to analysis the findings of the study. Data obtained was coded and entered into SPSS 20 statistical software system to generate relevant statistics. To enhance analytical rigour regression models were used to examine the trends and the strength of correlations. Paired Sample t-test was used to test the hypothesized relationships (before and after the annulment of the presidential election). Pearson correlation was used to explore relationships between the Abnormal returns and market returns specifically to determine whether there were significant associations between Abnormal Returns and Market returns before carrying out further analysis using regression analysis. The linear regression model was used to investigate the relationship between abnormal returns and market returns, illustrate the fitness of the model used in the study as well as the calculation that derived the alpha and beta coefficients for generation of the abnormal returns

3.6.1 Analytical Model

The data from this study were analysed using the market model to measure the estimation of abnormal returns. This model is well suited for event studies in many areas including evaluation of impacts of various interventions on stock exchanges. Relevant variables used in the market model are the actual and abnormal returns determined during the

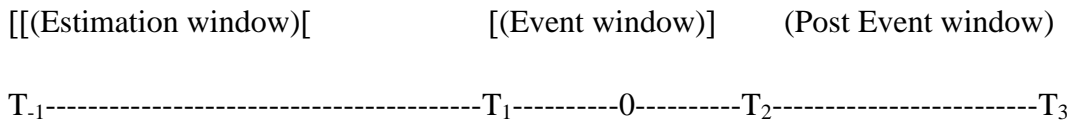
estimation and event window periods. The actual return is the expected return devoid of the influence of the event. The expected return for this period was computed by regressing security returns with market performance. The study adopted the event study methodological approach outlined by Mackinlay (1997) outlined below;

i. Identification of event

The announcement on 1st September 2017 by the Supreme Court to invalidate the presidential results conducted on 8th August 2017 was the event in this study.

ii. Identification of estimation, event and post event windows

Timeline and horizon



The share prices of selected firms will be examined over a period of 180 days. In this instance the estimation window (T₋₁-T₁) was set at 60 days. The event window (T₁—T₂) was categorised into three being (-5 to + 5 days), (-3 to + 3 days) and (-1 to +1 days) respectively in which the event day—the annulment of the presidential election result was denoted as day (0). The selection of the aforementioned dates were carefully done not only to ensure that time set is sufficient to capture the full impact of the event but not too long as to allow for intervening variables. The above selection was predicated on the assumptions that the market is relatively efficient

Consequently an Event Study with short-term horizons was used to eliminate distortions in prices of shares associated with interventions of circumstances present in the firm’s environment. In the instance of this study, the estimation window was set period of 56 days prior to the annulment covering other identified electioneering events that occurred before the annulment of the elections. These included the campaigning period, the holding of elections on 8th August 2017, the declaration of the presidential result, seven (7) days constitutionally challenge the result and fourteen (14) days set for determination of the presidential election petition.

Selection criteria

- The firms considered in this study are those that have been actively trading over the last six months period. Non of the firms were delisted as all actively traded during this period.

iii. Estimating parameters in the estimation window

These are the variables that yield expected returns during the event period. For the Market Models, the basis for use in this study, the constant (α_i), beta (β_i) and σ^2 are model restrictions derived by regressing market return for each security to the return of the market measure during the estimation period and were then used to compute the expected return. In the market model, the regression equation relationship is;

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \quad \text{Where;}$$

R_{it} is return of security (i) in period (t) during the estimation period

R_{mt} denotes the return of the market return for the NSE -20 Share index in the same period

ε_{it} Represents effect of enduring factors strongly affecting the stock

Estimated value of $E(\varepsilon_{it})=0$ and $\text{Var}(\varepsilon_{it})=\sigma^2$ i.e has a normal rank

Average abnormal return, AR_i is determined as $CAR_t = 1/k \sum_{t-1}^t AR_i$

The market parameters are computed as below

$$\beta_i = \frac{\sum_t^t ((R_{it} - \mu_m)(R_{mt} - \mu_{mt}))}{\sum_1^t ((R_{mt} - \mu_{mt}))^2}$$

$$\alpha_i = U_t - \beta_i \mu_m$$

$$\sigma^2 = 1/L \sum_1^t ((R_{it} - \alpha_i - \beta_i R_{mt}))^2$$

Where $U_t = 1/L \sum_t^t (R_{it})$

$$\mu_{mt} = 1/L \sum_t^t (R_{mt})$$

L is the number of days in the estimation period or where necessary the post event period.

iv. Measuring abnormal return in the event window

The effect of the announcement on stock returns was appraised by measuring the abnormal returns. This is the difference between the actual return during the event window and the expected return for this period as articulated by Corado (2010).

$$AR_{it} = R_{it} - E(R_{it}/X_t)$$

Where for a period time (t)

$$AR_{it} = \text{Abnormal Return}$$

$$R_{it} = \text{Actual Returns}$$

$$E(R_{it}/X_t) = \text{Normal or expected return}$$

X_{it} is the conditioning information for the normal return model

v. Aggregating abnormal returns

The abnormal returns were aggregated for the event window days across securities and over time to draw general inferences about the event.

$$CAR_t = \sum_{t-1}^t AR_i$$

CAR_t is the Cumulative Abnormal Returns

The Cumulative Average Abnormal Returns were also aggregated after dividing by k

$$CAAR_t = 1/K \sum_{t-1}^t AR_i$$

Where k is the number of days in the event window

vi. Constructing appropriate test measures

Paired sample T-test statistic were used. Variations were tested and statistic significance was set at 5% i.e. the confidence will be set at 95%. The Paired Samples t Test compares two means that are from the same individual, object, or related units. The two means typically represent two different times. The purpose of the test is to determine whether there is statistical evidence that the mean difference between paired observations on a particular outcome is significantly different from zero.

The Null and Alternate hypotheses were constructed as below for the abnormal returns and cumulative abnormal returns respectively.

Ho: AR =0 Annulment of Presidential Elections does not affect security returns

HI: AR ≠0 Annulment of Presidential Elections affects security returns

In the hypothesized relationship above (Ho), if the mean difference of Average abnormal returns before the annulment of the presidential elections and after the annulment of the presidential elections is zero, then annulment of the election doesn't affect share prices. If the mean difference is not equal to zero (H1), then Annulment of the presidential election affects the stock returns.

Similarly Paired sample T-test statistic was used to compare the means of cumulative abnormal returns before and after the annulment of the presidential election.

The cumulative abnormal returns were also tested for significance

Ho: CAR =0 mean abnormal returns performance is equal to zero

HI: CAR ≠0 Mean abnormal returns performance is not equal to zero

Under the null hypothesis if the event has no impact on the behaviour of the stocks returns (mean or variance), the distribution properties of the abnormal returns can be used to draw inferences on any period within the event window.

Test statistic

A t-test statistic was used since the sample size (n) is less than 30.

$t = (x - \mathcal{U}) / (S / \sqrt{N})$ X is the sample mean and \mathcal{U} is the population mean

S is the sample standard deviation for (n) sample size where $n \leq 30$

Where sample variance $S^2 = 1/n-1 \sum_{k=0}^n (Ri - AR)^2$, with degrees of freedom being n-1

Two-tailed test was employed with the critical value for rejection at 95% level of confidence.

When AR_s and CARs are statistically significant, then stock returns can be said to react to the annulment of presidential results. The hypothesis result was also used to test the form of market efficiency by determining if the markets incorporated fully the new information.

In the hypothesized relationship above (H_0), if the mean difference of Average abnormal returns before the annulment of the presidential elections and after the annulment of the presidential elections is zero, then annulment of the election doesn't affect returns of share. If the mean difference is not equal to zero (H_1), then Annulment of the presidential election affects the share returns.

Similarly Paired sample T-test statistic were used to compare the means of the cumulative abnormal returns before and after the annulment of the presidential election.

H_0 : $CAR = 0$ i.e. mean of cumulative abnormal returns before and after is zero

H_1 : $CAR \neq 0$ i.e. mean of cumulative abnormal returns before and after is in not equal to zero

Test statistic

$$t = \frac{AR - AR_0}{S/S/\sqrt{N}}$$

Paired sample T-test will be employed with the critical value for rejection at 95% level of confidence. If AR_s and CARs are statistically significant, then share can be said to react to the annulment of presidential results.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter provides data analysis, findings and interpretation of the study results within the framework of the study objective, methodology and hypotheses. Secondary data was collected from the Nairobi Securities Exchange and data was analyzed using the SPSS statistical software. The findings of the study are presented by use of relevant tables and figures that help to explain the results of the data analysis. The data findings are summarized and interpretation of the results made in line with the study objective. The study made use of daily stock prices for all the companies forming the NSE-20 share index for the period under review. Expected returns for the stocks were computed during the relevant estimation period. Similarly the abnormal returns were also computed using the relevant corresponding event window days. The structuring into these three data sets was purposively determined in order to isolate any effects of other confounding events that could have occurred during the event window days and more fundamentally for more specificity in the determination of event date. The pre-event and post event period covered -62 days starting on 2nd June 2017 to +59 days ending on 30th November 2017 respectively.

4.2 Preliminary tests

Preliminary tests were carried out to assess whether parametric or non-parametric tests would be used for further analysis and to draw appropriate statistical inferences. The most critical test is the test for normality.

4.2.1 Normality Tests

To assess the normality of the distribution of scores both Kolmogorov-Smirnov statistic and Shapiro-Wilk statistic were used. As shown in the table 1 below, Sig. values were not significant ($p > .05$) for both Kolmogorov-Smirnov and Shapiro-Wilk statistic for Average Abnormal Returns (AAR) before Annulment of Election, AAR After

Annulment of Election, Cumulative Average Abnormal Returns (CAAR) before Annulment of Election and CAAR After Annulment of Election). This is an indication that the data is normally distributed and therefore parametric tests (t-test, Correlation and regression analysis) can be used for further analysis.

Table 1: Tests of Normality

Variable	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
AAR Before Annulment of Election	.164	20	.166	.933	19	.172
AAR After Annulment of Election	.153	20	.200*	.955	19	.449
CAAR Before Annulment of Election	.137	20	.200*	.945	19	.296
CAAR After Annulment of Election	.147	20	.200*	.970	19	.762
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

4.3 Descriptive Statistics

A broad spectrum of analytical perspective were undertaken in order to broaden and deepen the information content of the variables of interest in this study. This covered descriptive statistics for the number of observations (N), the mean and the standard deviation and the cumulative abnormal returns of the invalidated presidential election.

4.3.1 Actual Returns

In respect of the actual returns for the N=20 observations comprising of the number of companies of the NSE-20 share index, the mean for the actual return before annulment of

the election is -0.0092 with standard deviation as 0.0091. After the annulment the mean and standard deviation were -0.0003 and 0.0076 respectively.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Avg. Actual Return after Annulment of Election	20	-0.0160	0.0100	-0.0003	0.0076
Avg. Actual Return Before Annulment of Election	20	-0.0273	0.0084	-0.0092	0.0091

The minimum and maximum scores for actual returns during the event window are shown below

Table 3: Descriptive Statistics of Average Actual Returns

Event Day	N	Minimum	Maximum	Mean	Std. Deviation
5	20	-.0235	.0978	.0072	.0236
4	20	-.0508	.0238	-.0009	.0148
3	20	-.0196	.0307	.0002	.0123
2	20	-.0621	.0356	-.0045	.0223
1	20	-.0556	.0188	-.0129	.0209
0	20	-.1283	.0098	-.0413	.0375
-1	20	-.0412	.0175	-.0033	.0132
-2	20	-.0187	.0543	.0013	.0157
-3	20	-.0526	.0059	-.0101	.0139
-4	20	-.0105	.0258	.0063	.0100
-5	20	-.0255	.0600	.0097	.0232

4.3.2 Abnormal Returns

The abnormal returns for each security were measured over the interval of the event window spanning over -1 to -5 days through +1 to +5 days. Test for statistical evidence

was obtained by carrying out a cross sectional aggregation for the time series aggregated individual security returns. The time series aggregation is the cumulative abnormal return over the event window being the sum of all the daily abnormal gains or losses. A distinction could however be made for those securities that had gains as against those that experienced abnormal losses during the event window consequential to the occurrence of the particular event of interest. However this study did not venture into this direction.

The minimum value of average abnormal return before annulment of the presidential elections, was -1.60%, while the maximum value before annulment of the presidential elections was -1.00%. The annulment of the presidential elections had a negative effect on the return of shares.

Table 4: Descriptive Statistics for Average Abnormal Returns Before And After Annulment Of Election

	N	Minimum	Maximum	Mean	SD
AAR Before Annulment of Election	20	-.0160	.0100	-.0003	.0076
AAR After Annulment of Election	20	-.0273	.0084	-.0092	.0091

Table 4 above show the average abnormal returns before and after the annulment at -0.003 and -0.0092 respectively.

Table 5: Descriptive Statistics for Abnormal Returns

Event Day	N	Minimum	Maximum	Mean	SD
Abnormal Return (d5)	20	-.0270	.0990	.0082	.0246
Abnormal Return (d4)	20	-.0535	.0254	-.0000	.0152
Abnormal Return (d3)	20	-.0266	.0252	-.0060	.0125
Abnormal Return (d2)	20	-.0724	.0222	-.0163	.0228
Abnormal Return (d1)	20	-.0789	-.0037	-.0318	.0211
Event Day 0 (Annulment of Election)	20	-.1327	.0062	-.0441	.0378
Abnormal Return (d_1)	20	-.0355	.0165	-.0051	.0124
Abnormal Return (d_2)	20	-.0266	.0548	-.0058	.0172
Abnormal Return (d_3)	20	-.0560	.0121	-.0090	.0154
Abnormal Return (d_4)	20	-.0142	.0249	.0070	.0106
Abnormal Return (d_5)	20	-.0273	.0609	.0113	.0239

Table 5 shows the mean abnormal returns on the date the invalidation of the presidential result to be -0.441.

Figure 1 below show the trend for the Average Abnormal Returns during the event window. From the trend, the abnormal returns reached negative territory from – 3 days , with the lowest point on the event date at -0.441.

Figure 2: Trend Analysis of Average Abnormal Returns

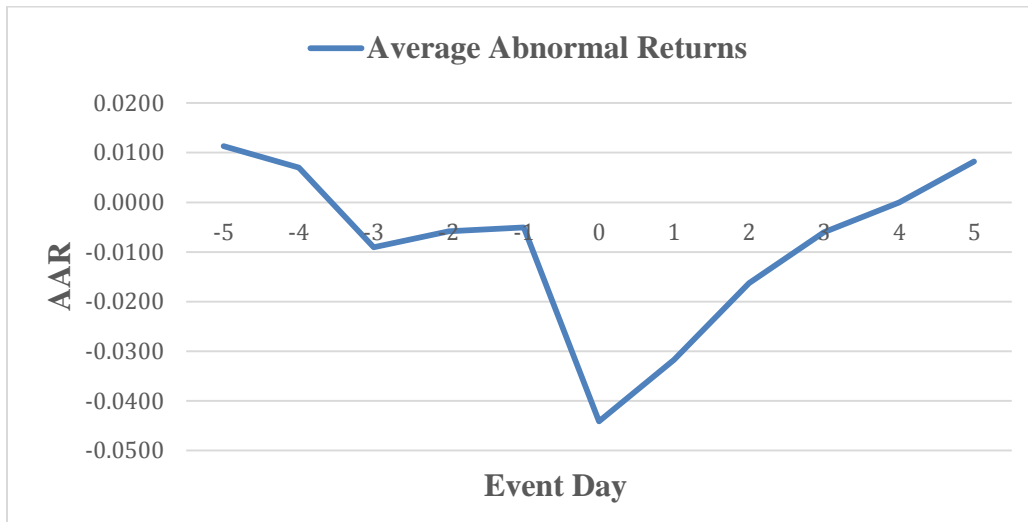


Table 6: Descriptive Statistics for Average Cumulative Abnormal Returns

CAAR	N	Minimum	Maximum	Mean	SD
Avg CAR Before Annulment of Election	20	-.0631	.0533	.0081	.0324
Avg CAR After Annulment of Election	20	-.2277	.0155	-.0926	.0656

As shown in Table 6 above, Average Cumulative Abnormal Returns before annulment is -0.0081 and -0.0926 after annulment with standard deviation of 0.0324 and 0.0656 respectively.

Table 7 below displays the statistics for the Cumulative Abnormal Returns. On event day (0) the cumulative abnormal returns was -0.458. At the end of the event window the cumulative abnormal returns was -0.0917 meaning that the market had shed off a total of 9.17 %.

Table 7: Descriptive Statistics of Cumulative Abnormal Returns

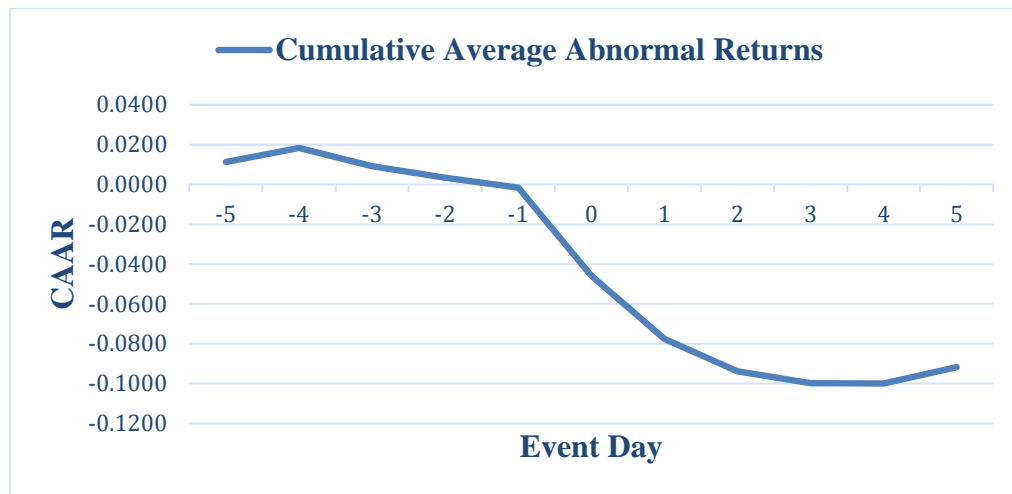
Event Day	N	Minimum	Maximum	Mean	SD
Cumulative Abnormal Return (d5)	20	-.2541	.0320	-.0917	.0772
Cumulative Abnormal Return (d4)	20	-.2272	.0009	-.0999	.0709
Cumulative Abnormal Return (d3)	20	-.2355	.0144	-.0999	.0687
Cumulative Abnormal Return (d2)	20	-.2248	.0131	-.0938	.0660
Cumulative Abnormal Return (d1)	20	-.1968	.0173	-.0775	.0543
Event Day 0 (Annulment of Election)	20	-.1266	.0320	-.0458	.0470
Cumulative Abnormal Return (d_1)	20	-.0798	.0502	-.0016	.0378
Cumulative Abnormal Return (d_2)	20	-.0829	.0808	.0034	.0401
Cumulative Abnormal Return (d_3)	20	-.0935	.0705	.0093	.0375
Cumulative Abnormal Return (d_4)	20	-.0405	.0702	.0183	.0311
Cumulative Abnormal Return (d_5)	20	-.0273	.0609	.0113	.0239

Table 8: Abnormal and Cumulative Abnormal Returns

Event Days	Average Abnormal Returns (AAR)	Cumulative Average abnormal Returns CAAR
5	0.82%	-9.17%
4	0.00%	-9.99%
3	-0.60%	-9.99%
2	-1.63%	-9.38%
1	-3.18%	-7.75%
0	-4.41%	-4.58%
-1	-0.51%	-0.16%
-2	-0.58%	0.34%
-3	-0.90%	0.93%
-4	0.70%	1.83%
-5	1.13%	1.13%

An examination of the column on abnormal returns shows that on the event day, the abnormal returns were -4.41% representing a significant drop on stock returns. The trend of accumulated abnormal returns as shown in Figure 2 below, indicated that the stock returns hit negative territory one day prior to the invalidation although the negative trend commenced on day -4 from 1.13 % on -5day.

Figure 3: Trend Analysis of Average Cumulative Abnormal Returns



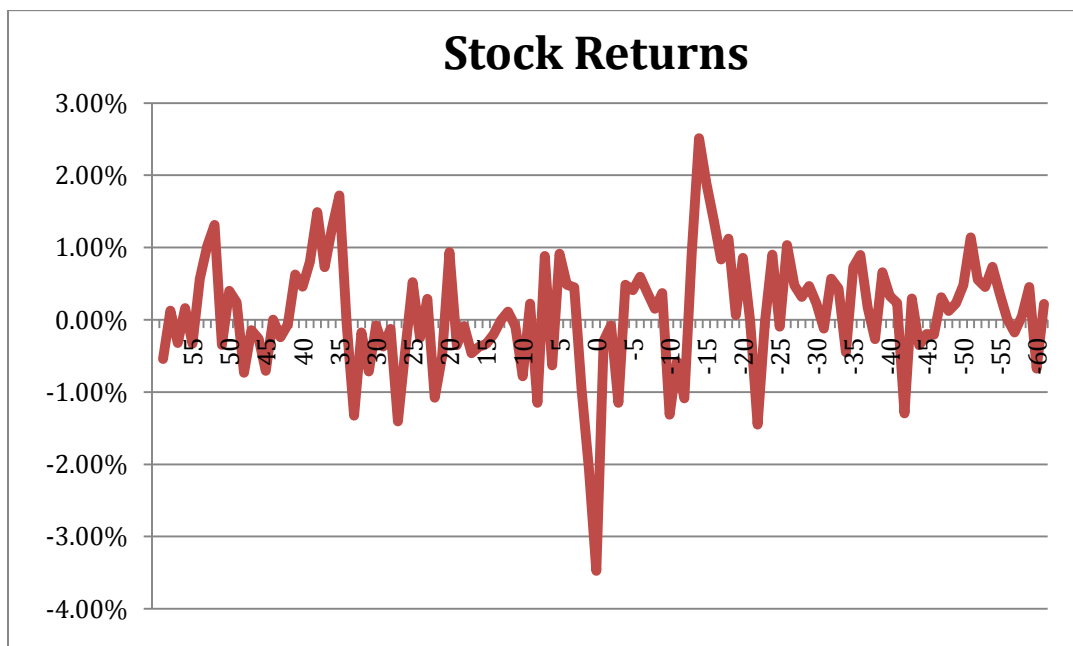
On the day of announcement, the market reacted strongly to the announcement, taking it as bad news going by the significant share price drop with corresponding reduction on stock returns. A further examination of the cumulative abnormal returns representing the total aggregated abnormal returns shows that the stock returns dropped significantly over the event window to -9.17%. The implication is that the market took the announcement of the invalidation of the presidential election result as bad news. It is instructive to note that the drop in share prices commenced on -3 days possible implication is that the market may have then began to sense some unforgiving circumstance that would hit the prices hard on the actual event day. One other possible explanation could be leakage of possible outcome and that from this day onwards, some market participants adopted a wait and see position as they attempted to calibrate their actions. A plausible explanation could be due to behavioral considerations.

4.3.3 Market Returns

The graph below show the trend of market performance from 2nd June 2017 all through to 30th November 2017 i.e period of -62 days prior to invalidation up till +59 days after the annulment date of 1st September 2017 designated as day 0 being the event date.

The trend shows that there was a significant drop on stock returns on event date far much larger than at any other period prior to or after the event.

Figure 4: Market Return 2nd June to 30th November 2017



Examinations of the share returns indicate a substantial drop arising from the invalidation of the Presidential Election Results suggesting that the markets reacted negatively to this event. This is to be contrasted with the performance of shares during the election held on 8th august 2017 in which the returns were positive at 2.5% and during the 2nd Presidential Election of 26th October 2017, in which the results were moderately positive at 1.72%.. It can be inferred that the market reacted favourably due perhaps to resolution of uncertainty when a result has been determined and a measure of stability predicted.

An in-depth review of the performance showed that the share returns were in negative territory from day -2 to day + 2 in the event window and generally oscillated from -1% to +1% up till the 26th October 2017 when another major political event occurred in which a positive up surge was recorded. This gradually dipped to stand at -0.54% on day -59 i.e. on 30th November 2017.

Figure 5: Market Returns During the event Window

The graph below displays the share returns before, during and after the annulment of the presidential election results on 1st September 2017.



Figure 5 above shows the trend in market returns, reveals a sharp decline on the returns on the event date with the market shedding off 3.47% percentage points. The loss was more pronounced from event -1 day to +2 day after which the effect showed markedly slow down. The import of this trend is that the event had a fundamental negative effect on the returns of shares at the Exchange.

4.4 Hypothesis Testing

4.4.1 Effect of the Annulment of Presidential Election on Abnormal

The following Null-Hypothesis (H0) and Alternative Hypothesis (H1) constructed as below for the abnormal returns were tested.

Ho: $AR = 0$ Annulment of Presidential Elections does not effect stock returns

HI: $AR \neq 0$ Annulment of Presidential Elections affects stock returns

In the hypothesized relationship above (Ho), if the mean difference of Average abnormal returns before the annulment of the presidential elections and after the annulment of the presidential elections is zero, then annulment of the election doesn't affect stock returns. If the mean difference is not equal to zero (H1), then Annulment of the presidential election affects the stock returns

A paired sample t-test was conducted using SPSS 20 to evaluate the effect of the annulment of the presidential election on AR. As shown in table 10 below, the mean difference between the two observations (AR before annulment of the presidential elections and after) is not equal to zero (The Mean difference was 0.0089) and it was statistically significant ($p < 0.05$). The mean scores of AR after annulment of election was 0.0089 higher than average scores of AR before annulment of the election

The Mean of AR before annulment of the election was ($M = -0.0003$, $SD = 0.0076$) and mean after annulment of election was ($M = -0.0092$, $SD = 0.0091$), $t(19), p < 0.05$.

Table 9: Paired Samples Statistics – Abnormal Returns

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Avg Abnormal Returns Before Annulment of Election	-.0003	20	.0076	.0017
Avg Abnormal Returns After Annulment of Election	-.0092	20	.0091	.0020

Table 10 shows the p-value for the correlation coefficient between the paired variables. The correlation between Average Abnormal returns before and after annulment of presidential elections was strong positive and statistically significant ($r = .744$, $p < 0.05$) and indication that the variables were strongly and positively correlated.

Table 10: Paired Samples Correlations For Abnormal Returns

		N	Correlation	Sig.
Pair 1	Avg Abnormal Returns Before Annulment of Election & Avg Abnormal Returns After Annulment of Election	20	.744	.000

Table 11: Paired Samples Test –Average Abnormal Returns before and after annulment of Presidential election

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Avg Abnormal Returns Before Annulment of Election - Avg Abnormal Returns After Annulment of Election	.0089	.0061	.0014	.0060	.0117	6.477	19	.000

Based on results of this study, the annulment of the presidential election has an effect on share returns since the mean difference of the scores for AR before and after annulment of the presidential election was statistically significant ($p < 0.05$). The alternative hypothesis was therefore accepted.

4.4.2 Effect of the Annulment of Presidential Election on Cumulative Abnormal Returns

The Null-Hypothesis (H0) and Alternate Hypothesis (H1) for the Cumulative Abnormal Returns (CAR) constructed as below were tested for significance;

Ho: CAR =0 The cumulative abnormal returns are zero

HI: CAR ≠0 cumulative abnormal returns not equal to zero

In the hypothesized relationship above (Ho), if the mean difference of Average Cumulative abnormal returns before the annulment of the presidential elections and after the annulment of the presidential elections is zero, then annulment of the election doesn't affect stock returns. If the mean difference is not equal to zero (H1), then Annulment of the presidential election affects the share prices.

Table 12: Paired Samples Statistics (Cumulative Abnormal Returns)

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Avg CAR Before Annulment of Election	.0081	20	.0324	.0072
Avg CAR After Annulment of Election	-.0926	20	.0656	.0147

As shown in table 11 above, the Mean CAR before annulment of the election was (M=-0.0081, SD=0.0324) and mean after annulment of election was (M=-0.0926, SD=0.0656), $t(19), p < 0.05$. The mean difference of CAR was .1007 (SD=0.0606)

Table 12 above shows the p-value for the correlation coefficient between the paired variables. The correlation between Average Cumulative Abnormal returns before and after annulment of presidential elections was strong, positive and statistically significant ($r = .671, p < 0.05$).

Table 13: Paired Samples Correlations (Cumulative Abnormal Returns)

	N	Correlation	Sig.
Pair 1 Avg CAR Before Annulment of Election & Avg CAR After Annulment of Election	20	.671	.001

A paired sample t-test was conducted using SPSS 20 to evaluate the effect of the annulment of the presidential election on CAR. As shown in table 14 below, the mean difference between the two observations (CAR before annulment of the presidential elections and after) is not equal to zero (The Mean difference was .1007) which was statistically significant ($p < 0.05$). The mean scores of CAR after annulment of election was .1007 higher than average scores of CAR before annulment of the election

Table 14: Paired Samples Test (Cumulative Abnormal Returns)

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Avg CAR Before Annulment of Election - Avg CAR After Annulment of Election	.1007	.0500	.0112	.0773	.1241	9.007	19	.000

Based on results of this study, the annulment of the presidential election affected the return of shares since the mean difference of the scores for CAR before and after annulment of the presidential election was statistically significant ($p < 0.05$). The alternative hypothesis is therefore accepted.

4.5 Correlation Analysis

To determine whether there were significant associations between Abnormal Returns and Market returns correlation analysis was carried out. In this study, the strength and direction of the relationships of the variables were explored using Pearson correlation. As shown in the table 15 below, the relationship between Abnormal returns and market return was strong, positive and statistically significant, ($r = .953$, $p < 0.01$).

Table 15: Pearson Product-Moment Correlation between AR and Market Return

		Average Abnormal Returns	Market Return
Average Abnormal Returns	Pearson Correlation	1	.953**
	Sig. (2-tailed)		.000
	N	11	11
Market Return	Pearson Correlation	.953**	1
	Sig. (2-tailed)	.000	
	N	11	11

** . Correlation is significant at the 0.01 level (2-tailed).

4.6 Regression Analysis

A linear regression model was used to investigate the relationship between abnormal returns and market returns. Regression analysis illustrates the fitness of the model used in the study as well as the calculation that derived the alpha and beta coefficients for generation of the abnormal returns.

The regression model as shown by Table 16, produced $R^2 = .908$, $F(1, 9) = 88.66$, $p < 0.05$. The value of R-square (R^2) is 0.908, which suggests that market return accounts for 90.8% of the variance in average Abnormal returns (AAR). The correlation coefficient (R) 0.953 and indication that there is a positive relationship between Average abnormal returns and market return

Table 16: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.953a	.908	.898	.0054309

a. Predictors: (Constant), Market Return

The ANOVA Table 17 below provides the results of a test of significance for R and R² using the F-statistic. In this analysis, the p-value is well below 0.05 (p<0.05) and therefore we conclude that R and R² between Average abnormal returns and market return are statistically significant.

Table 17: Regression ANOVA output (Dependent Variable: Average AR, Predictor: Market Return)

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	.003	1	.003	88.660	.000b
Residual	.000	9	.000		
Total	.003	10			

a. Dependent Variable: Average Abnormal Returns

b. Predictors: (Constant), Market Return

The table below (Table 18) provides information about model regression coefficients. Under the column marked unstandardized coefficients, the numerical value of the first row labelled (constant) is the value of the intercept (α) in the prediction/regression equation while the numerical value of the second row labelled as market return is regression coefficient of market return. Based on study results, there was a positive, and statistically significant relationship between AR and Market return ($\beta = 1.211$, $t = 9.416$, $p < .05$). The fact that the regression coefficient of market return was statistically significant is an indication that market return is a significant predictor of abnormal returns.

Table 18: Model Regression coefficients (Dependent Variable: Average abnormal returns, Predictor: Market Return)

Model		Unstandardized Coefficients		t	Sig.
		B	Std. Error		
1	(Constant)	-.003	.002	-1.438	.184
	Market Return	1.211	.129	9.416	.000

a. Dependent Variable: Average Abnormal Returns

The prediction model, $AR_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$, where; AR= Abnormal return, R_{mt} = Market return, and ε_{it} = Error term, the values for the regression weights are as follows:

$$AR_i = -0.003 + 1.211 R_{mt} + \varepsilon_{it}$$

Where;

AR_{it} is Abnormal return (i) in period (t) during the estimation period

R_{mt} denotes the market return.

ε_{it} Is the effect of enduring factors strongly affecting the stock?

The alpha value was -0.003 and the beta value was 1.211 in the model. From the regression equation above, the value of AR is -0.003 when the value of the independent variables is zero.

4.7 Extended Analysis for Different Event Window Days

An extended analysis conducted to determine whether by narrowing the event window, the parameters of the study would be significantly altered. In this instance, the event window was narrowed to three (3) days, two (2) days and one (1) day respectively. These results are displayed by tables 19(1) to 19 (8) as follows,

4.7.1 Paired T-Test (3 Days Before And After)

Table 19 (1): Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean	
Pair 1	Abnormal Returns 3 Days Before Annulment of Election	-0.0066	20	.00682	.00152
	Abnormal Returns 3 Days After Annulment of Election	-.0180	20	.01273	.00285

The Mean of AR before annulment of the election was ($M=-0.0066$, $SD=0.00682$) and mean after annulment of election was ($M=-0.0180$, $SD=0.01273$), $t(19), p < 0.05$.

Table 19 (2): Paired Samples Correlations

	N	Correlation	Sig.
Pair 1	20	.373	.105

The paired samples correlation is 0.373 with sig. value of 0.105

Table 19 (3): Paired Samples Test

	Paired Differences					t	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Abnormal Returns 3 Days Before Annulment of Election - Abnormal Returns 3 Days After Annulment of Election	.01138	.01199	.00268	.00577	.01700	4.246	19	.000

The paired sample test indicate the mean to be 0.01138 and the p value of zero (0)

4.7.2 Paired T-Test (2 Days Before And After)

The results of the paired T-Test for a scenario in which the event window is narrowed to two days after and before the annulment are depicted in table 19 (4) below. The means for the abnormal returns before and after the annulment are -0.0055 and -0.0240 respectively, with a standard deviation of 0.00885 before and 0.01643 after the invalidation.

Table 19(4): Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Abnormal Returns 2 Days Before Annulment of Election	-.0055	20	.00885	.00198
Abnormal Returns 2 Days After Annulment of Election	-.0240	20	.01643	.00367

Table 19(5): Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Abnormal Returns 2 Days Before Annulment of Election & Abnormal Returns 2 Days After Annulment of Election	20	-.066	.782

The paired sample correlations indicate that the correlation is -0.66 and significance at 0.782

Table 19(6): Paired Samples Test

Abnormal Returns	Paired Differences					T	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 2 Days Before Annulment 2 Days After Annulment	.01858	.01917	.00429	.00961	.02755	4.333	19	.000

Based on results of this study, the annulment of the presidential election had an effect on share returns since the mean difference of the scores for AR before and after annulment of the presidential election was statistically significant ($p < 0.05$). The alternative hypothesis is therefore accepted.

The paired sample test shows the mean of 0.1858 with p value is zero

4.7.3 Paired T-Test (1 Day Before And After)

Table 19 (7): Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Abnormal Return (d1)	-.014224	20	.0210060	.0046971
Pair 1 Abnormal Return (d_1)	-.004670	20	.0124100	.0027750

Table 19 (8): Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Abnormal Return (d1) & Abnormal Return (d_1)	20	-.170	.474

The comparative analysis of the findings when the event days were changed, show that the means of the samples are not zero and the mean differences were statistically significant ($p < 0.005$). The mean differences before and after the event are as indicated in the above tables. Varying event window changes the estimation parameters including the abnormal returns. The analysis of the results over different event windows is to find out possibility of clustering that occurs when the event window is set for longer days. Possibility of clustering occurs when two or more securities have overlapping event windows, causing performance between the returns to be correlated.

The potential drawback is that a type two error can occur of falsely rejecting the test of abnormal returns. This study offers a suggestion that precise the selection of event days brings out more succinct results indicating the compelling need to model correctly for more pronounced or sensitive outcomes.

The t-test statistic tests the portfolio of stocks for abnormal returns as opposed to the individual securities. In the instance of this study, the t-test statistic indicates that at 5% level of significance, the abnormal returns are all significant implying that the abnormal returns are not due to random chance but the occurrence of the event. This conclusion

agrees with the finding on similar studies on the effect of other event announcement such as dividends payment or mergers.

4.8 Summary and Interpretation of the Findings

4.8.1 Summary

The objective of this study was to determine if the annulment of the presidential election results had an effect on the share price movements or returns of securities at the Nairobi Securities Exchange. An analysis of the trend of the share returns shows that there was a significant drop as a result of the invalidation of the election results on 1st September 2017. When contrasted against share returns during other related political events of announcements of the election results on 8th August and 26th October 2017 in which positive outcomes were recorded albeit with lesser magnitude, it becomes apparent that the invalidation had a profound impact on the share returns at the Nairobi Securities Exchange.

In order to provide statistical information, preliminary tests conducted indicated that the data was normally distributed thus permitting the use of parametric tests i.e. t-test, correlation and regression analysis for further analysis.

The mean of Average Returns (AR) before annulment of the election was ($M=-0.0003$, $SD=0.0076$) and mean after annulment of election was ($M=-0.0092$, $SD=0.0091$), $t(19)$, $p<0.05$. The mean difference of Average Abnormal Returns (AAR), before and after the annulment of the election was -0.926 and 0.0081 respectively. The Null hypothesis that if the mean difference of Average abnormal returns before and after the annulment of the presidential elections is zero, then annulment of the election doesn't affect share returns is rejected in favour of the alternative hypothesis.

The p-value for the correlation coefficient between Average Abnormal returns before and after annulment of presidential elections was strong, positive and statistically significant ($r = .744$, $p<0.05$) and indication that the variables were strongly and positively correlated

A paired sample t-test conducted to evaluate the effect of the annulment of the presidential election on CAR found the mean difference between the two observations (CAR before annulment of the presidential elections and after) not equal to zero (The Mean difference was .1007) which was statistically significant ($p < 0.05$). The mean scores of CAR after annulment of election were .1007 higher than average scores of CAR before annulment of the election. Similar studies conducted in the Nairobi Securities Exchange give similar findings.

Pearson correlation, which was used to assess both the direction and strength of the relationship between abnormal returns and market return, showed a strong positive and statistically significant, ($r = .953$, $p < 0.01$) outcome. Further the regression model produced $R^2 = .908$, $F(1, 9) = 88.66$, $p < 0.05$.

The value of R-square (R^2) is 0.908 suggesting that market return accounts for 90.8% of the variance in average Abnormal returns (AAR). The correlation coefficient (R) 0.953 and indication that there is a positive relationship between Average abnormal returns and market return.

The test of significance for R and R^2 using the F-statistic shows the p-value is well below 0.05 ($p < 0.05$) and therefore we conclude that R and R^2 between Average abnormal returns and market return is statistically significant.

Based on study results of the regression analysis, there was a positive, and statistically significant relationship between AR and Market return ($\beta = 1.211$, $t = 9.416$, $p < .05$). The fact that the regression coefficient of market return was statistically significant is an indication that market return is a significant predictor of abnormal returns.

4.8.2 Interpretation

From the results of various tests conducted and analysis of the trend of share returns, several inferences can be drawn for this study.

Firstly, that the mean scores of AR before and after the annulment of the election were less than zero means that we rejected the null hypothesis that the election had no effect of the result and concluded that the elections affected the stock returns

Secondly, the p-value for the correlation coefficient between Average Abnormal returns before and after annulment of presidential elections was strong, positive and statistically significant ($r = .744$, $p < 0.05$) and indication that the variables were strongly and positively correlated

Thirdly, a paired sample t-test conducted to evaluate the effect of the annulment of the presidential election on CAR found the mean difference between the two observations (CAR before annulment of the presidential elections and after) is not equal to zero (The Mean difference was .1007) and the mean difference was statistically significant ($p < 0.05$). The mean scores of CAR after annulment of election was .1007 higher than average scores of CAR before annulment of the election

Additionally, Pearson correlation, which was used to assess both the direction and strength of the relationship between abnormal returns and market return, showed a strong positive and statistically significant, ($r = .953$, $p < 0.01$) outcome. Further the regression model produced $R^2 = .908$, $F(1, 9) = 88.66$, $p < 0.05$.

Further, the value of R-square (R^2) is 0.908 is indicative of the completeness of the model. In this instance the market return accounts for 90.8% of the variation in the dependent variable the Abnormal returns. The import of this is that the market model substantially explains the variations except that there is a slightly under 10% which is explained by other variables. The import of this finding is that there is a need to develop a more robust model that could help better explain the changes in the abnormal returns

The correlation coefficient (R) 0.953 and indication that there is a positive relationship between Average abnormal returns and market return. This means that the alternate hypothesis is accepted that the invalidation of the election results affected the market performance or the stock returns.

The test of significance for R and R² using the F-statistic shows the p-value is well below 0.05 (p<0.05) and therefore we conclude that R and R² between Average abnormal returns and market return is statistically significant.

Based on study results of the regression analysis, a positive, and statistically significant relationship between AR and Market return ($\beta = 1.211$, $t = 9.416$, $p < .05$) was found. The fact that the regression coefficient of market return was statistically significant is an indication that market return is a significant predictor of abnormal returns.

There was no observation of abnormal returns post the event window, thus we conclude that there was no lingering, meaning that there was no sluggish. Therefore the validity of the semi strong form market efficiency with respect to the event cannot be questioned, confirming the theory of semi-strong form efficiency, that market quickly incorporated the information.

The semi strong form market efficiency hypothesis asserts that asset prices already reflect all publicly available information and thus not possible to earn abnormal returns using fundamental or technical analysis. Further there were no observations of abnormal returns prior to the event window, confirming that there were no information leakages that significantly affected the market prices, providing further evidence of non-violation of the efficiency market hypothesis

Finally, the trend analysis corroborated by statistical findings, confirm that the invalidation of the election results had a negatively profound effect on the return of shares at the Nairobi Securities Exchange, confirming existence of uncertainty and other high risks associated with this political event.

4.8.3 Previous Studies

Related previous studies carried out to determine the effect of political events in Kenya have shown mixed results. These study findings are in agreement with Menge, et al. (2014) on the effect of elections on stock market returns at the Nairobi securities

exchange that actual stock returns were significantly higher before elections than after election periods.

The findings of Kabiru et al (2015) are in consonance with this study particularly for the general elections of 1997 and 2007, in which it was found that the general election affected the market performance. This study confirms the findings in other jurisdictions that conclude that political events affect the performance of stock markets.

Though the Nairobi Stock exchange is still a nascent securities exchange market, information about the annulment of the presidential election were quickly and accurately reflected in the stock prices. The import is that this market is semi-strong efficient, a finding in agreement with that of Menge et al (2014).

By default, the dominance of the efficiency market hypothesis was confirmed, largely because of the scope of the design that did not address behavioural aspects of the investors

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the summary of the finding. Conclusion and recommendations drawn from these findings are discussed in relation to the objectives of the study which was to determine the effect of the annulment of the presidential election results in Kenya on share returns for companies listed at the Nairobi Securities.

5.2 Summary of findings

The study found the invalidation of the election result had a profound negative effect on the stock returns at the Nairobi Stock exchange. The effect was more pronounced on the day the results were annulled, with the market losing 4.37%. During the event window, the market shed off a total of 9.17%

The means performance of the market, actual return and abnormal return are low after and before the announcement of nullification of presidential election. The results indicate that the share returns reacted to annulment of the presidential election results before and after the annulment of the presidential election results.

5.3 Conclusions

Several conclusions can be drawn from this study. Firstly From the results, the returns of shares at the Nairobi Securities Exchange were significantly affected by the invalidation of the presidential result. On the day of annulment, the market return fell by a record 4.37% percentage points shedding off a substantial amount of profit and equity. The import of this is that market players perceived this event as uncertain and high risk, hence the market reaction. It can also be inferred the investors are risk averse. This reaction could have come largely from foreign dominated counters. An examination of all the other indexes like the Nairobi All Share Index also reveal that the total market reacted negatively to the information content of the annulment.

Secondly, over the event window the market lost a total of 9.17%. Evidently, political events in the fashion of invalidation of Presidential Results tend to impact negatively on financial performance of stocks, suggesting that it could even be in the order of effect imposed by calamity and war in which the effects take catastrophic dimensions. This not only signals the need but urges an imperative response preventative measures to be taken to stem the market from further decline on the backdrop of the uncertainty imposed by the invalidation.

Thirdly, the up and down swings of the market and the absence of long- lasting trajectory that would permit market prediction suggest several investment implications, ignore the market volatility completely, buy and hold when the stocks are on downward trend to sell when the market recovers from the political event shock. The converse action is true for events expected to have positive impact.

The market model used predicted well the stock return. Whilst this may suffice for an average investor, a sophisticated investor desirous of accurate real time information aimed at maximizing returns could deploy better predictive mechanisms that take into account all variables predicated on complete knowledge.

The finding that the abnormal returns and the return of the market moved in a similar fashion means that the market reacted to the invalidation of the presidential election result. However given that the R^2 explains approximately 91% suggests the need to develop a more exhaustive model that could fully explain the changes in the abnormal returns.

Further, the absence of abnormal results post the event suggests that the information about the event was quickly and fully incorporated and reflected in the stock price or returns meaning that Nairobi Securities Exchange Market is semi strong-form efficient.

5.4 Recommendations

The invalidation of the presidential results had a significant impact on the event date suggesting the need for policy and market players to calibrate their orientations. The

likely high losses experienced by the market during the event window calls into question how the stock market regulators treated the need to cushion the traders from losses, which may have ripple effects on other markets and economy in general. The import is that the government, through the capital markets needs to design risk response policies that help safeguard investor confidence.

Given that the reactions to the market could have come in through nervous investors largely foreign sensitive to country and political risks, a policy construction aimed at promoting more participation by local investors could help stem the negative tide likely to be experienced in such times.

It is also instructive for investors to adopt a wait and see attitude in order to void possible portfolio losses on account on behavioral biases that often are not driven by rational economic fundamentals.

The fact that it appears that the response was not informed by fundamentals, heralds a need to inform policy formulators and investors to carefully consider the interplay of all forces internal and external in framing their investment decisions in an environment characterized by dramatic uncertainties and risks.

5.5 Limitations of the Study

This study was done within an electioneering period and the presence on concomitant or confounding events could not be ruled out. Possible political events, which could have had an effect is the general election event that was carried out on 8th August 2017. The announcement of the results was done a week later and lingering effects this event could have had an effect on the annulment. While other firms may have had other individual factors or events occurring specific to them, failure to assimilate such variables could impair the isolative effect of the annulment of the presidential results on the specific share prices.

Measuring abnormal returns as daily averages voided the measurement of intra day market response or at the time of announcement by the Supreme Court of the invalidation.

The inability to isolate possible moderating macroeconomic factors in the external environment of the firm challenges the finding that makes an assumption that changes were attributable solely to the event. Not considered in the estimation of relevant returns were such factors as dividends payout, capital structure, changes in governance structure, debt and extent of opportunity leverages as well as cash flows, liquidity and size of the firm.

Behavioral biases by market participants could have been at play during the event timelines, and were not factored in the analytical approach

The study also suffered from failure to employ other sophisticated analytical tools such as intelligent neural systems that have the ability to isolate and compute the interactive factor effects on the statistical findings of the study.

5.6 Suggestions for Further Research

In order to enhance the analytical rigor, it may be useful to consider other analytical approaches so that the data is properly triangulated. In this way the accuracy can be enhanced and a comparison undertaken. This might change the policy recommendations arising from the effect. A study that uses analytical tools such as GARCHEVET and more recently advanced research tools can help identify day effects. This study and data limitation does not permit use of intraday data and makes the faulty assumption that trading was uniform during the day and yet in reality this is far from being the case.

Secondly, deepening and broadening the analysis to specific sectors and to individual stocks will reveal more useful information to the investors. Generalizing information about the market may not be very useful to investors, as they may not act appropriately in a clinical manner. Information efficiency and accuracy is a desired attribute for information savvy investors who want to act on more accurate and timely information

Given that stock prices are not uniform throughout the day, it is suggested that a research can be undertaken with prices on at least three levels, so that the day can be truncated into two. Hourly stock prices can also be analyzed in order to get real time response and to be able to track changes along the way. Waiting till close of business may actually distort the findings and mar the specific conclusions derived that would have been more useful to market participants who trade on a continuous basis

This study also opens the possibility of carrying out a comparative analysis to the occurrence of similar events across the eastern African market or beyond. In particular an extended study on how other markets like the bond, derivatives and the REITS reacted can offer further deeper insights. A study to find out the impact on foreign counters of companies with strong internal investor presence would greatly help in managing foreign capital flow into the economy. If the risks were attenuated then appropriate interventions would be critical to reverse negative effects of capital flight by investors that are risk averse. A collapse of the market is definitely bad news to a struggling market yet to be accepted.

Further appreciating invalidation of presidential results have occurred in three other jurisdictions namely, Maldives, Ukraine and Austria it may be useful to carry out a research on the effect on the invalidation and consequently perform an intra jurisdictional analysis that may bring out salient differences or similarities. A comparative analysis can also be extended to proxy or near similar events for purposes of calibration and input into policy designs.

Longitudinal and cross sectional designs can be adopted to review the impact of this and similar events over time and across various sectors of the economy even those that are not trading at the Nairobi stock exchange. Given that the informal economy contributes significantly, it may be of profound interest to carry out a research on how the invalidation affected the business in many sectors particularly from transport to small scale trading. This will bridge the apparent policy disconnect in the framing and execution of socio-economic policies that impact on the real economy.

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APPENDICES

APPENDIX 1: List of Companies Listed on the Nairobi Securities

Exchange

1	ARM Cement
2	Atlas African Industries
3	BOC Kenya
4	Bamburi Cement
5	Barclays of Kenya
6	Britam Kenya
7	BAT Kenya
8	Car & General (k)
9	Carbacid Investments
10	Centum Investment
11	CiC insurance Group
12	Co-operative Bank of Kenya
13	Crown Pains Kenya
14	Deacon (East Africa)
15	Diamond Trust Bank of Kenya
16	Eaagads ltd
17	East African Breweries
18	East African Cables
19	East Africa Portland Cement
20	Equity Group Holdings
21	Eveready East Africa
22	Express Kenya
23	Flame Tree Group Holdings
24	HF Group
25	Home Africa
26	I&M Holdings
27	Jubilee Holdings
28	Kakuzi
29	Kapchorwa Tea Kenya
30	KCB Group
31	KenGen Company
32	KenolKobil
33	Kenya Airways
34	Kenya Ochards
35	Kenya Power & Lighting
36	Kenya Re-Insurance Corporation
37	Kurwitu Ventures
38	Liberty Kenya Holdings
39	Limuru Tea

40	Longhorn Publishers
41	Mumias Sugar Co
42	Nairobi Business Ventures
43	Nairobi Securities Exchange
44	Nation Media Group
45	National Bank of Kenya
46	New Gold Insurer Ltd
47	NIC Group
48	Olympia Capital Holdings
49	Rea Vipingo
50	Safaricom
51	Sameer Africa
52	Sanlam Kenya
53	Sasini
54	Stanbic Holdings
55	Standard Chartered Bank Kenya
56	Standard Group
57	Stanlib Fahari- REIT
58	Total Kenya
59	TPS Eastern Africa
60	Transcentury
61	Uchumi Supermarkets
62	Umeme
63	Unga Group
64	Williamson Tea Kenya
65	WPP Scan group

Appendix 2: List of Firms Comprising the NSE 20 share index

1. Sasini Limited
2. Kenya Airways Limited
3. Nation Media Group
4. Scan group Limited
5. Centum Investment Company Ltd
6. Kenya Commercial Bank Limited
7. The Cooperative Bank of Kenya Limited
8. Standard Chartered Bank Limited
9. Barclays Bank Limited
10. Equity Bank Limited
11. CfC Stanbic Holdings Limited
12. East African Breweries Limited
13. British American Tobacco Kenya Limited
14. Athi River Mining Limited
15. Bamburi Cement Limited
16. KenolKobil Limited
17. Kenya Power Limited
18. Kenya Electricity Generating Company Limited
19. British-American Investments Company (Kenya) Limited
20. Safaricom Limited