

**THE EFFECT OF POLITICAL RISK ON STOCK PRICES  
A CASE STUDY OF CONSTITUTION REFERENDUM EVENTS  
IN KENYA**

**BY  
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**A MANAGEMENT RESEARCH PROJECT SUBMITTED IN  
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE  
AWARD OF MASTER OF BUSINESS ADMINISTRATION,  
SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

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## DECLARATION

This research project is my original work and has not been presented to any examination body for the award of any certificate.

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I also wish to thank the NSE staff for providing me with the necessary information.

## **DEDICATION**

To God and to my family more so to my late Dad, Mum and Son Dennis.

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## ABSTRACT

The value of a firm is equal to the present value of its expected cash flows, discounted by investors' required rate of return. Both present values of expected cash flows and required rates of return could be affected by a number of factors among them the outcome of the Constitution Referendum vote either positively or negatively. Indeed, the outcome of the referendum votes could lead to changes in the cash flows of Kenyan firms through the uncertainty associated with it.

This paper studies the impact of political risk on stock prices at NSE by examining the two constitution referendum events in Kenya. The uncertainty surrounding the outcomes of the votes presented some form of political uncertainty. This study uses the theory of Efficient Market Hypothesis to forge a link between political risk and stock performance in the Nairobi Stock exchange.

This study analyses the performance of Nairobi stock exchange during the two constitution referendum events. Kenya has had two constitution referendum events, one on 21<sup>st</sup> November 2005 and the other one on 4<sup>th</sup> August 2010. The 2005 vote was defeated while the second one was successful hence giving Kenyans a new constitution. The objective of the study was to confirm whether these events had any effect on the stock prices of listed companies. This was done by obtaining daily stock prices data for the period of the study and then obtaining benchmark normal return and Cumulative Average Abnormal Returns.

The study results as indicated by the Cumulative Average Abnormal Returns confirm that the stock prices were affected by both the events. However the greatest effect was felt in the 2005 constitution referendum vote where high number of companies experienced negative cumulative Average Abnormal returns as compared to the 2010 event. This may be explained by the fact that the passing of a new constitution was expected to pave the way for fundamental reforms in governance and also bring about increased operational efficiency of a devolved Government including, a dispersion of increased business opportunities, which will considerably and favorably induce Kenya's economic multiplier.

The preliminary results of this study are inconsistent with the Efficient Market Hypothesis which asserts that financial markets are “informational efficient”, or that prices on traded assets (e.g stocks, bonds or property) contends the view that current stock prices fully reflect available information about the value of the firm, and there is no way to earn excess profits, (more than the market overall), by using this information.

## **LIST OF ABBREVIATIONS**

- AG-Attorney General  
AR- Abnormal Returns  
CAR-Cumulative Abnormal Returns  
CAAR-Cumulative Average Abnormal Returns  
CMA-Capital Markets Authority  
EMH-Efficient-Market Hypothesis  
GDP-Gross Domestic Product.  
ICRG-International Risk Guide  
IIEC-Interim Independent Electoral Commission.  
ICC-International Criminal Court  
IMF-International Monetary Fund  
KANU-Kenya African National Union  
I.SE-London Stock Exchange  
MNC-Multi National Corporations  
MP-Member of Parliament  
NARC-National Rainbow Coalition.  
NSE-Nairobi Stock Exchange  
NYSE-New York Stock Exchange  
UN-United Nations  
U.S- United States  
UIH-Uncertain Information Hypothesis  
PBC-Political Business Cycle.  
PSC-Parliamentary Select Committee  
9/11-September 11



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# CHAPTER ONE: INTRODUCTION

## 1.1 Background

While political uncertainty takes many different shapes and forms, such as changes in the government and changes in its domestic and foreign policy, this paper focuses on one particular kind of political uncertainty, which is associated with constitution referendum votes. In a democratic system, referendum votes are major political events for re-distribution of political power, which has important implications for the future political and economic course of a country. As a result, it presents a major uncertainty to both domestic and foreign investors.

Political risk analysis seeks to interrogate the interaction of political authorities with economic actors. They include risks that result from governmental actions such as economic policies, fiscal policy, regulation, the development of legal instruments and relations with the other countries and international organizations. It also includes the behavior of the wider civil society consisting of trade union and protest/pressure groups. Other sources of political risks include corruption, bureaucracy, poor stakeholder relations, political shifts, terrorism, religion and health.([www.africaelections.tripod.com](http://www.africaelections.tripod.com))

Shun,(2006), defines referendum, as one of the prominent features of a plebiscitary democracy. is the right of the people to introduce their choice directly in a specific issue and to have a determining feature. It can be considered as a form of direct or participatory democracy. Heywood, (1999) defined the reasons and areas for the application of a referendum: A plebiscite or referendum provides an opportunity for



the electorate to make a decision directly on a specific issue, and it is out of the representational democracy, since it is a different application from empowering politicians and allowing them to make decisions on behalf of the electorate.

The value of a firm is equal to the present value of its expected cash flows, discounted by investors' required rate of return. Both present values of expected cash flows and required rates of return could be affected by the outcome of the referendum results either positively or negatively. Indeed, the outcome of the referendum votes could lead to changes in the cash flows of Kenyan firms through the uncertainty associated with outcome. With the new Constitution, comes a likely launch of far-reaching institutional reforms ever witnessed since Kenya's independence. The new constitution ultimately is expected to change the face of Kenya, and pave the way for fundamental reforms in governance, expected to bring about increased operational efficiency of a devolved Government including, a dispersion of increased business opportunities, which will considerably and favorably induce Kenya's economic multiplier.

There was a general feeling that the old Constitutional framework did not encourage business to thrive; this may explain why numerous Multi-National Corporations (MNC's) were pulling out of the country. It is not possible to operate in a country with no policy coherence. By and large the new Constitution was seen as very business friendly as it incorporates a lot of input from the business community. The Fifth Schedule is especially important, because it details with the mechanism for realizing the implementation of the Constitution.

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The Efficient-Market Hypothesis (EMH) asserts that financial markets are "informationally efficient". That is, one cannot consistently achieve returns in excess of average market returns on a risk-adjusted basis, given the information available at the time the investment is made. Semi-strong EMH claims both that prices reflect all publicly available information and that prices instantly change to reflect new public information. Shum's (1996) study of the stock market response to the 1992 Canadian constitutional referendum argues that one of the reasons investors did not react to the vote was that the outcome had already been factored into stock prices before the actual referendum.

In an events context, impacts encompass a variety of positive benefits and negative impacts which might accrue as a result of an event taking place. These impacts and benefits may be apparent before the event takes place, during the event or after the event. They may be felt by a variety of stakeholders including businesses, investors and governments among others. An event will affect people in different ways, thus, there may be inequity in the distribution of impacts and benefits.

The occurrences of major political events signal potential shift in national policy or uncertainty in society development, so they can presumably cause market-wide valuation influence. Nevertheless, most of existing studies focus on effect of economic events on stock prices and there has been far fewer empirical works that examine the impact of political events on the stock markets.

The movements of stock markets have been studied in the past by finance researchers. Stock markets are markets where companies' derivatives and stocks are traded at an agreed price. Examples of stock markets include the New York Stock Exchange

(NYSE), the London Stock Exchange (LSE) and the Paris Bourse. The available literature review shows different reactions of stock markets to different events. Events such as press releases, rumors, panics or euphoria can psychologically affect traders, thus affect the stock market.

Studies on performance of stocks during events such as elections have concluded that stock markets are affected by election outcomes. Bacmann and Bolliger ,(2001) in their study on Political shifts in other parts of the world concluded that political events have an effect on the performance of the financial markets. The emerging literature suggests that the political events e.g elections have significant explanatory power in emerging market performance. In addition the financial crisis in the 1990's happened during electoral periods or political transitions (Wei,1999).

Kenya has had two different constitutional referendum votes in the last 4 years that gave opposite results. The vote for 2005 was defeated while the one for 2010 was successful. The two event result may have had various implications on the Kenyan economy and more so in particular the prices of stocks in the Nairobi stock Exchange.

## **1.2 Problem Statement**

A number of event studies have been under taken establishing the relationship between the performance of stock exchange in the world and political activities in specific countries. Most of these studies were carried out in the developed countries. The question that this research attempts to answer in this case is whether stock prices behave differently around constitution referendum events than in normal periods for firms listed in the NSE.

The particularity of the November 21st, 2005 Constitution referendum is that opinion polls released before could not clearly determine a winning side for the referendum. In that sense, there was a unique climate in Kenya at that time. The financial markets could hardly resolve the political uncertainty before the actual vote took place. This is not typical of election events for which opinion polls can usually reveal the outcome within a reasonable margin of error.

On the other hand the constitution referendum for 4<sup>th</sup> August 2010, was peaceful and opinion polls before had predicted a clear win for the Yes" campaign. However .it was still uncertain of the reaction of the losers who comprised of prominent politicians and the clergy and who also commanded a sizeable following and subsequent effect on the stock market. Based on the outcomes of the two referendum votes it is therefore necessary to study the effect of the two referendum votes in Kenya that gave two opposite results.

In Kenya there is no documented study on the effect of the constitution referendum so far. However several studies on the effect of stock market before and after general elections have been carried out. Gilbert, (2007) in his study of behavior of stock markets in Kenya before and after general elections indicates a strong relationship. Murigi, (2008) did a study on the effect of Kenyan elections in the returns at NSE and observed that abnormal returns were positive before the election event and negative after the event period. Ngugi.(2008) .in his study on the stock market performance before and after general elections also made similar conclusions.

### **1.3 Research Objective**

This study sought to examine the effect of constitutional referendum event on stock prices for firms listed at the Nairobi stock exchange.

### **1.4 Significance of the Study**

By carrying out this study on the effect of political risk on stock prices in Kenya and specifically looking at the 2005 and 2010 referendum events this study will add to the already scarce literature in this area of political risk. There is a growing trend of constitution referendum votes especially in Africa. Kenya had one in 2010, Southern Sudan in 2011, Egypt in 2011 and other countries like Zimbabwe are also preparing to have one.

The study findings will be useful to future scholars who might use it to further studies on political risk and its impact on financial markets. Investors will greatly benefit from the findings of this study as they will use it to make decisions when faced with such an event.

The study findings will also show just how resilient the Kenyan stock market is when faced with events such as constitution referendum vote. Though Kenya capability has been questionable as demonstrated in several events as terrorist attacks and post election violence, clearly it is times like these in which fears of economic downtime continue to exist, that such realities of resilience bear reminding.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter has discussed the review of related theoretical and empirical literature on political risks. Little has been done on the effect of constitutional referendum both in locally and globally and hence more emphasis on other studies touching on political risk. The contextual issues and conceptual issues have been addressed in this chapter. Event study methodology has also been discussed.

### **2.2 The theoretical Background**

Basic idea underlying market efficiency is that competition will drive all information into the price quickly. This idea got its start at least in part due to Ball and Brown's (1968) paper looking at earnings announcements.

#### **2.2.1 The Efficient Market Hypothesis**

An efficient market is the one which securities fully reflect all possible information quickly and accurately. The concept holds that investors incorporate all available information into their decisions about the price at which they are willing to buy and sell. At any point in time then, the current price of a security incorporates all information. Additionally, the current price reflect not only past information such as might be found in company's report and financial publications, but also events that have been announced but haven't yet occurred, like a forthcoming dividend payment. Furthermore, the current prices reflect predictions about future information. Investors actively forecast important events and incorporate those forecasts into their estimates. Obviously, because of keen competition among investors, when the new information

becomes known; the price of the security adjusts quickly. This adjustment is not always perfect. Some time it is too large and other times too small. But on average it balances out and is correct. The new price in effect is set after investors have fully assessed the new information (Malkiel, 2003).

Fama, (1970) reviewed the theory of Efficient Market Hypothesis. In his study he made a distinction between three forms of EMH: the weak form, the semi strong form and the strong form of market efficiency. It is the semi strong form of EMH that has formed the basis for most research.

The strong form suggests that security prices reflect all available published and unpublished information: even privately held information. Seyhun , (1986) provides sufficient evidence that insiders profit from trading on information not already incorporated into prices. Hence the strong form does not hold in a world with uneven playing field. The semi strong form of EMH asserts that security prices reflect all publicly available information. There are no undervalued or overvalued securities and thus, trading rules are incapable of producing superior returns. When new information is released, it is fully incorporated into the price rather speedily. The availability of intraday data enabled tests which offer evidence of public information impacting stock price within minutes (Gosnell, Keown and Pinkerton, 1996).

To establish whether the market is strong, researchers have employed event studies. One can study the effect of events such as earnings/dividends announcements, bonus issues, rights issues or changes in accounting policies. The semi strong efficient market hypothesis implies that the share price reflects an event or information very



quickly and therefore, it is not possible for an investor to beat the market using such information. The weak form of the hypothesis suggests that past prices or returns reflect future prices of returns the security prices reflect all past information about the price movements. It is therefore not possible for an investor to predict future security price by analyzing historical prices and achieve a performance better than the stock market index. The inconsistent performance of technical analysts suggests this form holds. However the concept of the weak form was expanded to include predicting future returns with the use of accounting or macroeconomic variables.

While the semi strong form of EMH has formed the basis of most empirical research, recent studies have expanded the tests of market efficiency to include the weak form of EMH. There continues to be disagreements on the degree of market efficiency. This is exacerbated by the joint hypothesis problem.

However several studies have been done to challenge the theory of the EMH. These studies show that security prices are not random and can be exploited.

### **2.2.2 Political Business Cycle (PBC)**

This theory is based on the assumption that voters consider their financial situation when voting. Policy makers may thus generate a rising stock market by manipulating policy instruments. They may also promise to make the stock market perform well after being elected or re-elected. This increases the stream of expected dividends from the stock. For example the anticipation of lower taxes on profits will increase the expected dividends.

Nordhaus (1975) postulates that, irrespective of their political orientation, incumbents will pursue policies that maximize their chances of re-election. As a result they will try to self servingly attune the business cycle to the timings of elections. The economy will be stimulated by unsustainable expansionary policies before elections, and harsh actions aimed at curbing the resultant inflation will have to follow at the beginning of the new term of office.

Empirically, the political business cycle theory implies that stock makers systematically aim for a rise in the stock prices in periods preceding elections. However it does not necessarily mean that policy makers have not used policy instruments for their re-election or that the political business cycle does not exist even when no political effect is detected on the stock market. It only shows that investors have not adjusted their perception on the stream of dividends and the expected return to the policy moves.

### **2.2.3 Partisan Theory of Economic Policy**

This theory stresses the uncertainty over the policies that the next government will pursue after an election has taken place. A requisite of this theory is that the ideology of a government has a distinct effect on economic policies. As a result, differences in the ideology composition of a government will be reflected in policy differences and therefore in stock prices determinants i.e. the stream of future dividends or the expected returns.

The idea of the partisan approach is that political parties address themselves to voters with different preferences. Leftwing parties are assumed to prioritize employment in their policy goals, where as the right wing parties presumably favour low inflation.

Investors thus expect that, in comparison with left wing parties, the right wing parties will pursue more pronounced supply side policies (Hibbs, 1977).

All things being equal, an extension of a right wing government will thus imply stable if not rising stock prices. When evaluating empirical results, it must be taken into account that expected policy changes are uncertain and that this uncertainty differs over time. Since the stock market penalizes uncertainty, this in itself will affect prices negatively.

### **2.3 The concept of political Risk**

By virtue of both its subject matter and the objects of its inquiry, political risk strides across numerous disciplines. While not the exclusive focus of their subject matter, to varying degrees scholars concerned with developmental politics and economics, political economists concerned with the issues of trade, investment and the activities of multinational enterprise, and students of international business exploring risk and risk exposure and its effects upon the activities of firms, have all grappled with the problem of political risk ( Robock , 1971).

Defining political risk is thus wrought with danger and more accurately a function of disciplinary perspective than objective statement. For students of international business, for example, it reflects a concern with the management of exogenous factors that can influence market conditions. According to (Llewellyn ,1994), 'political risk' refers to the possibility that political decisions or events in a country will affect the business climate in such a way that investors will lose money or not make as much money as they expected when the investment was made."

The objective of political risk analysis is thus clear: "an effort to project 'harm' to the investor by political forces or from political decisions." According to (Llewellyn, 1994) it involves an analysis of history or current events that might lead to a "projection of circumstances under which harm occurs. The purpose of making such a projection is to prepare the investor for dealing with such risks."

## **2.4 Empirical evidence of stock price reaction to political risk**

### **2.4.1 The impact of arrival of new information on stock prices.**

Market efficiency is attained because of competitive activity of security analysts. Each analyst seeks to detect mispriced securities and create perfectly hedged portfolios with zero net investment but non zero expected return. Therefore in an efficient market, the expected returns implicit in the current price of the security should reflect available information including its risk which means that investors who buy at these informationally efficient prices should receive a rate of return that is consistent with the perceived risk of the stock. Individual analysts can make mistakes of judgment or estimation but where the mistake made are independent, the consensus, which is the price reflected in the market, is the best possible. (Foster, 1984 and Beaver, 1981).

Efficient market Hypothesis hold that any new information about a firm is incorporated into share prices rapidly and rationally with respect to the direction and magnitude of the share price movement. Security prices tend to fluctuate randomly around their intrinsic values and fully reflect the latest available information in the market. No investor has an advantage in predicting a return on a stock price since no

one has access to information not readily available to anyone else, and thus consistent abnormal returns cannot be earned (Fama, 1976).

Efficient Market Hypothesis has been categorized into three major levels depending on the type of information assumed to be used in the market in setting prices, the weak, semi- strong and strong form. The semi -strong form of the EMH asserts that security prices fully reflect all public information and that security prices adjust rapidly to the release of all public information: that is, current security prices fully reflect all public information. (Mishkin, 2007).

#### **2.4.2 The effect of elections on stock markets**

Shum's (1996) study of the stock market response to the 1992 Canadian constitutional referendum argued that one of the reasons investors did not react to the vote was that the outcome had already been factored into stock prices before the actual referendum. Another example is the Parti Quebecois election of September 1994 for which they found no short term effect on Canadian or Quebec stock returns.

Bacmann and Bolliger ,(2001)Studied the effect of Political shifts in other parts of the world and concluded that political events have an effect on the performance of the financial markets.The emerging literature suggested that the political events e.g. elections have significant explanatory power in emerging market performance. Stovall. (1992) studied the relationship between stock market performance and presidential cycles from 1901 to 1991. The author examined percentage annual change in the Dow Jones industrial average and found that equities performed best in the last two years of a president's term.

Research studies by Niederhoffer, Gibbs and Bullock (1970), Peel and Pope (1983) and Gemmill (1992) examine the stock price behaviors during governmental and/or congressional elections in various developed countries, and they find some inefficiency in share prices around the time of elections, implying a profitable trading rule. They argued that changes in government administration caused by elections tend to affect financial policies or legislation, thereby significantly affecting stock prices.

Various other studies have been carried out in America and Britain examining the performance of stock markets in these countries before and after general elections. They have also examined the performance of the stock markets based on the party of the President or Prime Minister in Power. These studies indicate that the stock market react differently based on the party of the President elected in America while there was no difference in Britain. Siegel (1998) have provided consistent evidence that the immediate market reaction to the election of a Republican President is positive (increase in stock index). The party effect in which popular wisdom asserts that the stock market prefers Republican President to Democrats turns out to be false. Indeed the evidence supports the opposite proposition in that stock markets in the U.S. perform better under Republicans (Jones, 2002).

In Kenya studies on the effect of stock market before and after general elections have been carried out .Gilbert, (2007) in his study of behavior of stock markets in Kenya before and after general elections indicates a strong relationship. Murugi, (2008) did an almost similar study and observed that abnormal returns were positive before the election event and negative after the event period. Ngugi.(2008) .in his study on the

stock market performance before and after general elections confirmed that there is a significant difference in the performance of the market for years before and after the general elections. He also concluded that the volatility of the market appears to be lowest in years just before a general election and also in election years themselves.

Although investors regard political risk as a major source of uncertainties, the linkage between political risks and volatility of stock returns has not been thoroughly investigated. Political risk is of concern to investors as it affects business and consumer confidence, investments, consumption and output. Bittlingmayer (1998).

#### **2.4.3 The effect of fiscal policies on stock markets**

Fiscal policy as a form of political risk is used by governments to influence the level of aggregate demand in the economy, in an effort to achieve economic objectives of price stability, full employment and economic growth. Monetary policy rests on the relationship between the rates of interest in an economy, that is the price at which money can be borrowed, and the total supply of money. Monetary policy uses a variety of tools to control one or both of these, to influence outcomes like economic growth, inflation, exchange rates with other currencies and unemployment.

A policy is referred to as contractionary if it reduces the size of the money supply or raises the interest rate. An expansionary policy increases the size of the money supply, or decreases the interest rate. Further monetary policies are described as accommodative if the interest rate set by the central monetary authority is intended to spur economic growth, neutral if it is intended to neither spur growth nor combat inflation, or tight if intended to reduce inflation. (<http://www.history-society.com>)

Financial market-based analysis of the expected effects of policy changes has traditionally been exclusively retrospective. When a government weighs a policy decision with important economic consequences, investors and other economic agents struggle to assess its likely effects. Normally, this struggle is conducted individually or in small groups and its outcome is not credibly observable to economists or policymakers. Experts can disseminate estimates of the likely effects of the policy, but their professed assessments suffer from a cheap talk problem and may be tainted by political expediency.

The policy framework in Kenya is considered conducive for capital market development as a wide range of fiscal and other incentives have been put in place to encourage capital market activities. In addition, privatization policies are being implemented through the capital market to encourage wider ownership of public enterprises and to provide a key source of new listings.

#### **2.4.4 The effect of legal and regulatory framework on stock markets.**

The objective of a legal and regulatory framework is traditionally based on the need to correct market imperfections and unfair distribution of resources. At the macro level, transparency rules impose equal treatment (for example, rules regarding takeovers and public offers) and the correct dissemination of information (insider trading, manipulation and, more generally, the rules dealing with exchanges microstructure and price discovery mechanisms). At the micro level, such rules aim at non-discrimination in relationships among intermediaries and different customers i.e. conduct of business rules. (Allen and Santomero, 1997). Markets can be affected by legal and regulatory irregularities hence posing a political risk.



Legal and regulatory framework for capital markets in Kenya experienced a major boost between 2000 and 2002 when the CMA released rules and regulations on different aspects of capital markets. [www.nse.co.ke/History.htm](http://www.nse.co.ke/History.htm).

#### **2.4.5 The impact of bureaucracy on stock markets.**

The impact of bureaucracy as a form of political risk is of great concern to the performance of stock markets. Methodical and predictable bureaucratic performance in support of markets facilitates capital accounting and calculable risk-taking and hence, the development of large-scale capitalist enterprises. In this sense, public administration plays a crucial role in providing and guaranteeing the institutional environment for securities development and the separation of ownership and control. The core argument is that the calculability of risks embedded in the institutional environment lowers transaction costs and promotes public trust in financial markets that provide external funding to corporations.

Country case studies of the 20th century confirm that securities markets and owner separation typically develop when the state-firm interface is characterized by routinely performed, calculable, impersonal and rule-based transactions; in contrast, owner-management and family-owned firms prevail in the context of highly personalized and relationship-based state structures (Whitley 1999). Also, the historical account of stock trading seems to support a crucial role of the state. Whether the old commodities markets of Bruges, Venice, Genoa, or Pisa, or the early stock markets in Amsterdam, Brussels or London, they all developed in an atmosphere of reliable and supportive public governance, which was trusted by

merchants, traders and investors (North and Thomas 1973; Gelderblom and Junker 2004; Prak 2005; Greif 2006).

#### **2.4.6 The effect of corruption on stock markets**

Corruption as a form of political risk and as defined by the Transparency International is 'the abuse of entrusted power for private gain', or in other words, use of official position, rank or status by an office bearer for his own personal benefit. Examples of corrupt behavior would include: bribery, extortion, fraud, embezzlement, nepotism, cronyism, appropriation of public assets and property for private use, and influence peddling. Mauro (1995), who laid the foundation for the literature on corruption and growth, found that corruption significantly decreases investment rates which extend to a slow down of economic growth. Empirical works by La Porta et al.(1998),Levine (1999) and others recognized a strong link between law enforcement and corruption and pointed to a detrimental effect of corruption on economic development.

Meon and Sekkat (2005) investigated the effect of corruption on growth and investment taking into accounts the quality of governance. They concluded that in countries with a low quality of governance corruption only enhances the detrimental effect on economic growth and does not compensate for bureaucratic inefficiencies.

Mendez and Sepulveda (2006) conclude that countries with low levels of corruption tend to benefit from it while countries with high levels of corruption the detrimental effects kick in. Overall, the results of the most recent studies reveal that the marginal effect of corruption depends on the institutional quality in a given country and that corruption is beneficial up to a certain degree.

## **2.5 The concept of constitution referendum event in Kenya and events perceived to have political risk exposure in Kenya.**

### **2.5.1 The History of constitution referendum in Kenya**

The first Commission for Constitutional Reform of Kenya was set up in the year 2000. In 2005, a referendum was held on the proposed, eventually unsuccessful Wako draft of the constitution. The consultation process on this draft was not particularly comprehensive, largely because it put too much power in the hands of executives (Kimenyi & Shughart, 2008).

The most recent phase of constitutional process was mandated by the Constitution of Kenya Review Act, passed in December 2008. The act reflects the accord mediated by former UN Secretary General (Kofi Anan) to end the post-election violence. It also gives effect to the judgement in the *Njoya v AG* case, which held that a new constitution could not be adopted without a referendum or proper constitutional convention. The court held that the Constitution of Kenya Review Commission, set up under the 1998 Constitution Review Act, did not constitute a proper constitutional convention. The requirement to hold a constitutional convention is in line with a number of other constitutional systems in Africa, for example in Togo. (Drew, A., 2001 ).

Under the act, an eleven-member Committee of Experts was mandated to produce a first draft of the constitution. The committee contained nine voting members and two ex-officio members, including three foreigners who had voting rights and were meant to ensure that the process of constitutional formation would not be associated with

pre-existing ethnic or political factions. The Proposed Constitution of Kenya was the final result of the revision of the harmonized draft constitution of Kenya.

It was initially published in November 2009. The public was given 30 days to scrutinize the draft and forward proposals for amendments to their members of parliament (MPs), after which a revised draft was presented to the Parliamentary Committee on 8<sup>th</sup> January 2010. The Parliamentary Select Committee (PSC) revised the draft and returned it to the Committee of Experts who published a Proposed Constitution on 23<sup>rd</sup> February 2010. The majority of Kenyans (66.9%) voted in favour of the new constitution on 4<sup>th</sup> August 2010 and the President signed it into law on 27<sup>th</sup> August 2010.

### **2.5.2 General elections in Kenya**

Elections in Kenya in recent years have been cause for violence and fragmentation, such as during the presidential elections of 2007. Though a multiparty democracy since 1992 and holding elections since 1962, the country has serious institutional problems which make it hard for elections to be completed smoothly. After major political demonstrations in the 1990's, KANU bowed to public pressure and began reviewing the electoral system. In 1992 the amendment that had maintained a single party system was revoked, returning Kenya to multi-party elections.

The constitutional shift did not immediately manifest itself in well run multiparty elections as evidenced in the two general elections of 1992 and 1997. However, by 2002 the international community thought the electoral system was generally free, as KANU peaceably transferred power to the National Rainbow Coalition

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(NARC). Violence has been known to trouble elections, most recently in the December 2007 presidential elections, where an estimated 1,300 people were killed and 600,000 displaced. Kenya is headed for another general election in 2012.

### **2.5.3 The terrorist attacks**

Kenya has been the battlefield of tragic terrorist attacks on western interests .In 1980 terrorists linked to the Palestinian Liberation Organization attacked the Jewish-owned Norfolk hotel in Nairobi killing 15 people, most of them Kenyans. In 1998, the U.S. Embassy in Nairobi, Kenya and the one in neighboring Tanzania were bombed.

On September 11 (9/11), 2001 a massive terrorist attack on the United States, resulting in the collapse of the World Trade Center's twin towers and surrounding buildings, and part of the Pentagon building were carried out by members of al-Qaeda terrorist organization.

In 2002, three suicide bombers attacked an Israeli-owned hotel, killing 11 Kenyans, 3 Israelis and wounding dozens. Almost simultaneously, at least two missiles were fired at - but missed - an Israeli airliner taking off from Mombasa airport. More recently, in May 2003, warnings of possible imminent attacks in Kenya were issued on by officials in Washington, London and Berlin. Britain ordered British airlines to halt flights to Kenya due to fears of attacks in the east African country. Later, London told its citizens to avoid visiting Djibouti, Eritrea, Ethiopia, Somalia, Tanzania, and Uganda due to what it called a "clear terrorist threat." The U.S. and German governments issued similar warnings about travel to East Africa after Kenyan authorities reported sighting a known Al-Qaeda terrorist in neighboring Somalia.

#### **2.5.4 The naming of six people as the key masterminds of the post election violence in Kenya by the International Criminal Court (ICC)**

The International Criminal Court (ICC) prosecution office named six Kenyans on 15<sup>th</sup> December 2010, most of them high ranking politicians as masterminds of the country's worst post-independence violence that claimed at least 1,300 lives and left 600,000 displaced.

#### **2.5.5 The appearance of six people named as the key masterminds of the post election violence in Kenya by the International Criminal Court (ICC)**

The first Kenyans to ever face accusations before an international criminal court took to the stands in April 2011 in a preliminary appearance over events stemming from the 2008 post election violence.

#### **2.6 Event study methodology**

In this method, researchers are particularly concerned with the hypothesis that an event will impact the value of a firm or firms, and that this impact will be reflected on stock and other security prices, manifesting itself in abnormal security returns. Many types of events are studied with event studies methodologies.

Event studies are used to measure market efficiency and to determine the impact of a given event on security prices. More important, from a trading perspective, event studies are used to back-test price data to determine the usefulness and reliability of trading strategies. Event study methodology is the set of econometric techniques used to measure and interpret the effects of an event on firms' securities.



### **2.6.1 Event Studies and Market Efficiency**

In a perfectly efficient market, any piece of new relevant information would be immediately reflected in security prices. One should be able to determine the relevance of a given type of information by examining the effect of its occurrence on security prices.

### **2.6.2 Models for computing normal returns as suggested by Brown and Warner [1980], in their classic study of event study methodologies.**

In order to measure the impact of an event on security returns, one must have a consistent means of measuring normal returns. Brown and Warner (1980) identified the following models, Mean Adjusted Returns, Market Adjusted Returns, Market and Risk Adjusted Returns and Multiple Index Model Adjusted Returns.

In this study, the mean adjusted returns model will be used. In this model, the normal return for a security equals a constant  $K_i$ . Typically, the mean return for the security over a sampling of time periods outside of the event window (the estimation period) serves as the constant  $K_i$ . The expected return for the security is assumed to be constant over time, though ex-ante returns will vary among securities. Thus, the abnormal return for the security is found:  $e_{i,t} = R_{i,t} - K_i$ .

From the foregoing literature review it is evident that a number of event studies have been under taken establishing the relationship between the performance of stock exchange in the world and political activities in specific countries. Most of these studies were carried out in developed stock exchanges. The general findings of those studies confirms that performance of the market appears to be strongly linked to the

political events and political regime prevailing. However only very few papers have attempted to show the impact of constitutional referendum votes on stock markets and non in Kenya.

This paper will attempt to fill this gap in the literature by providing firm level evidence on how political uncertainty surrounding constitutional referendum elections affects stock prices. An advantage of focusing on national elections is that, in most instances, they are exogenous political episodes that are well distributed across countries and over time, providing us with a powerful econometric test.

## CHAPTER THREE: RESEARCH METHODOLOGY

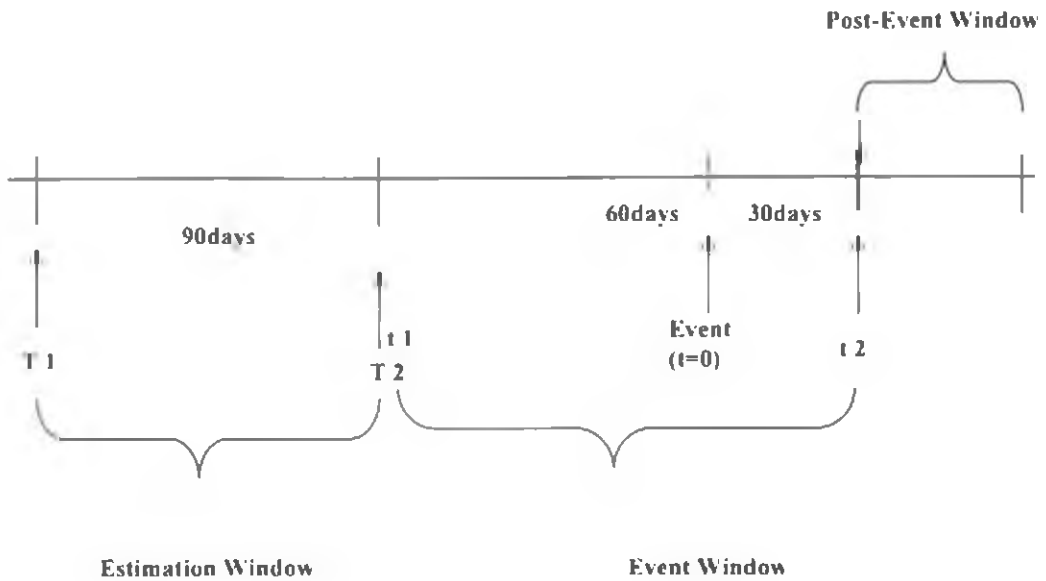
### 3.1 Research Design

This is an event study analyzing the stock market performance before and after the two constitution referendum events in Kenya that took place on 21<sup>st</sup> November 2005 and on 4<sup>th</sup> August 2010.

### 3.2 Data collection

The study used secondary data from the NSE. Data was obtained from the NSE and other licensed data vendors in the market. The study first identified all the firms listed in the NSE which have no major firm-specific announcements during the estimation and event intervals and also whose shares are actively traded so that non-synchronous price data will not occur. The maximum number of trading days during the study period was confirmed and all those with 2/3 and above were selected.

Data was therefore collected for the days from June 21<sup>st</sup> 2005 to 20<sup>th</sup> September 2005 (Estimation Window period) and then from 22<sup>nd</sup> September 2005 to 21<sup>st</sup> December 2005 for the purposes of the 2005 constitution referendum. Data for the purposes of the 2010 referendum was collected from 4<sup>th</sup> March 2010 to 3<sup>rd</sup> June 2010 (Estimation Window period) and then from 5<sup>th</sup> September 2010 to 3<sup>rd</sup> December 2010 (event window).



**Diagrammatic representation of date collection time line**

Estimation Widow Period=3 months that ends 2 months before the event (T1, T2)

Event window (t1-t2) =3 months (Two months before event and 1 month after event).

Event date-Date of the event i.e 21<sup>st</sup> November 2005 and 4<sup>th</sup> August 2010.(t=0)

**3.3 Data Analysis**

The main data variable for this study is the stock prices for stocks of companies listed in the NSE. The stock price is used as a measure of the performance of each specific company on each trading day. An increase in the stock price indicates that the firms' performance is on an upward trend.

Principally the Cumulative Average Abnormal return (CAAR) (measures of volatility) was analyzed to capture the effect of the constitution referendum event on

the performance of the market for the study period. Positive CAAR indicate that the stock prices increased during the event while negative CAAR indicated that the stock prices went down. This analysis was done by segments and also by sector to establish which of the sectors if any was affected most during the two events. Ranking of the CAAR for the two events was done.

## **CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION OF THE RESULTS**

### **4.1 Introduction**

This section presents results of the performance of stock prices of firms listed in the NSE for the periods around the two constitution referendum event dates in Kenya i.e 21<sup>st</sup> November 2005 and 4<sup>th</sup> August 2010. The results have been obtained from the analysis of stock prices for each day during the study periods. Analysis was mainly centered on obtaining the Cumulative Average Abnormal returns (CAAR) for each stock for the entire study period. To be able to compute the Abnormal returns, first a benchmark normal return was derived using a 3 month calendar period daily data and then getting the Abnormal return (AR) for each of the stock of the firms listed in the NSE for 3 months. The Cumulative Abnormal Returns (CAR) obtained as the summation of all the differences between the actual daily stock value and the benchmark normal return was then found. Cumulative Average Abnormal Returns (CAAR) was then computed and ranking done based on the individual stock and the segment. A comparison of the two event results based on percentages was done and analyzed.

### **4.2 Statistical Analysis**

#### **4.2.1 Statistics for the 2005 constitution referendum**

A total of 50 companies listed in the NSE as at the beginning of the analysis period were selected for analysis. Data from June 21<sup>st</sup> 2005 up to 20<sup>th</sup> September 2005 (Estimation Window period) was analyzed to give the benchmark normal returns

(see appendix 2). In order to compute the Cumulative Abnormal Returns (CAR) and subsequent Cumulative Average Abnormal Return (CAAR) data was collected for the event period starting from 22<sup>nd</sup> September 2005 to 21<sup>st</sup> December 2005 (see appendix 3). There was a total of 58 trading days during this period. It was noted that not all the companies listed had a non interrupted trading series for the entire period. To ensure reliability of the data companies that had traded for more than 2/3 ( $2/3 \times 58$ ), that is, 38 days were selected for further analysis. A total of 33 companies met this criterion. Cumulative Average Abnormal Return (CAAR) was computed for the 33 companies and ranked.

**Table 1: Summary of the Ranking results**

<b>CUMULATIVE AVERAGE ABNORMAL RETURNS BY SECTOR FOR THE 2005 REFERENDUM EVENT</b>					
<b>MAIN INVESTMENT MARKET</b>	<b>NO. OF COMPANIES</b>	<b>-VE CAAR</b>	<b>+VE CAAR</b>	<b>%-VE CAAR</b>	<b>%+VE CAAR</b>
<b>AGRICULTURAL</b>	3	2	1	66.67%	33.33%
<b>COMMERCIAL AND SERVICES</b>	5	3	2	60.00%	40.00%
<b>FINANCE AND INVESTMENT</b>	10	4	6	40.00%	60.00%
<b>INDUSTRIAL AND ALLIED</b>	13	3	10	23.08%	76.92%
<b>ALTERNATIVE INVESTMENT MARKET SEGMENT</b>	2	2	0	100.00%	0.00%
<b>TOTAL</b>	33	14	19	42.42%	57.58%

Table 1 represents the results for all the sample firms and the Cumulative Average Abnormal Returns calculated for each of the 33 firms selected. 19 companies (57.58%) had a positive CAAR while 14 (42.42%) of them showed falling returns.

## **4.2.2 Market segments analysis**

### **4.2.2.1 Main Investment Market Segment (M.I.M.S)**

Under this segment companies are categorized under different sectors namely, Agriculture, Commercial and Services, Finance and investment and Industrial and Allied (See Appendix 4).Of the selected companies,3 in the agricultural sector,5 in the Commercial and Services,10 in the Finance and Investment and 13 in the Industrial and Allied sector met the criteria for selection in the analysis. This represented 93.9% of the total selected.

In the Agriculture sector,2 out of the 3 companies had a negative Cumulative Average Abnormal Returns meaning that the stock prices for these companies declined.3 out of the 5 in the Commercial and Services sector showed negative Cumulative Average Abnormal Returns implying that the share prices went down while 2 had positive CAAR. Out of the 10 companies that were selected from the Finance and Investment sector only 4 had negative Cumulative Average Abnormal returns.3 out of the 13 companies in the Industrial and Allied sector had negative Cumulative Average Abnormal Returns. In overall of the 31 companies in the Main Investment Market Segment (M.I.M.S) 42 % of them experienced a decline in share prices during the study period while 58% of them had the share price increase.



#### **4.2.2.2 Alternative Investment Market Segment (A.I.M.S)**

Under this segment 2 Companies met the criteria for selection for analysis in this study .Both had a negative Cumulative Average Abnormal returns implying that the share prices declined.

#### **4.3 Statistics for the 2010 referendum**

A total of 58 companies listed in the NSE and whose price data was available as at the beginning of the analysis period were selected .Data from 4<sup>th</sup> March 2010 up to 3<sup>rd</sup> June 2010 (Estimation Window period) was analyzed to give the benchmark normal returns(see appendix 5).In order to compute the Cumulative Abnormal Returns (CAR) and subsequent Cumulative Average Abnormal Return (CAAR) data was collected for the period starting from 4<sup>th</sup> June to 3<sup>rd</sup> September 2010 (event period).There was a total of 63 trading days during this period. It was noted that not all the companies listed had an uninterrupted trading series for the entire period. To ensure reliability of the data companies that had traded for more than 2/3 (2/3 of 63 days ) that is .42days were selected for further analysis. A total of 43 companies met this criterion. Cumulative Average Abnormal Return (CAAR) was computed for the 43 companies and ranked (See appendix 6).27 out of the 43 companies had a positive CAAR while 16 had a negative CAAR.

**Table 2: Summary of the Ranking results**

<b>CUMULATIVE AVERAGE ABNORMAL RETURNS BY SECTOR FOR THE 2010 REFERENDUM EVENT</b>					
<b>SECTOR</b>	<b>NO. OF COMPANIES</b>	<b>-VE CAAR</b>	<b>+VE CAAR</b>	<b>%-VE CAAR</b>	<b>%+VE CAAR</b>
<b>AGRICULTURAL</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>66.67%</b>	<b>33.33%</b>
<b>COMMERCIAL AND SERVICES</b>	<b>8</b>	<b>4</b>	<b>4</b>	<b>50.00%</b>	<b>50.00%</b>
<b>FINANCE AND INVESTMENT</b>	<b>14</b>	<b>4</b>	<b>10</b>	<b>28.57%</b>	<b>71.43%</b>
<b>INDUSTRIAL AND ALLIED</b>	<b>16</b>	<b>5</b>	<b>11</b>	<b>31.25%</b>	<b>68.75%</b>
<b>ALTERNATIVE INVESTMENT MARKET SEGMENT</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>50.00%</b>	<b>50.00%</b>
<b>TOTAL</b>	<b>43</b>	<b>16</b>	<b>27</b>	<b>37.21%</b>	<b>62.79%</b>

Table 2 represents the results for all the sample firms and the Cumulative Average Abnormal Returns calculated for each of the 43 firms selected. 27 companies (62.79%) had a positive CAAR while 16 (37.21%) of them showed falling returns.

#### **4.3.1 Market segments analysis**

##### **4.3.1.1 Main Investment Market Segment (M.I.M.S)**

Under this segment companies are categorized under different sectors namely, Agriculture, Commercial and Services, Finance and investment and Industrial and Allied (See appendix 5). Of the listed companies, 3 in the agricultural sector, 8 in the Commercial and Services, 14 in the Finance and Investment and 16 in the Industrial and Allied sector met the criteria for selection in the analysis. This represented 95.3% of the total selected.

In the Agriculture sector, 2 out of the 3 companies had a negative Cumulative Average Abnormal returns meaning that the stock prices for these companies declined. Of the 8 companies in the Commercial and Services sector 4 had positive Cumulative Average Abnormal returns while the rest 4 had negative CAAR. Out of the 14 companies that were selected from the Finance and Investment sector only 4(28%) had negative Cumulative Average Abnormal returns. The rest 10 (72%) had positive CAAR. 5(31%) out of the 16 companies in the Industrial and allied sector had negative Cumulative Average Abnormal returns, while 11 (69%) had positive CAAR). In overall, of the 41 companies in the Main Investment Market Segment (M.I.M.S) 36.5% of them experienced a decline in share prices during the study period while 64.5 % of them had the share price increase.

#### 4.3.1.2 Alternative Investment Market Segment (A.I.M.S)

Under this segment 2 Companies met the criteria for selection for analysis in this study. 1 had a positive Cumulative Average Abnormal returns while the other had negative.

**Table 3: Summary of the effect of the two events**

CUMULATIVE AVERAGE ABNORMAL RETURNS FOR THE TWO REFERENDUM EVENTS					
	NO. OF COMPANIES	-VE CAAR	+VE CAAR	%-VE CAAR	%+VE CAAR
2005 EVENT	33	14	19	42.42%	57.58%
2010 EVENT	43	16	27	37.21%	62.79%
TOTAL	76	30	46	39.47%	60.53%

In overall the study found out that of the two events, the 2005 event resulted into a higher percentage of companies showing declining returns (42.42%)as compared to the 2010 events (37.21%).

# **CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

## **5.0 Introduction**

This study's main objective was to establish the effect of the constitution referendum events held in Kenya held on the 21<sup>st</sup> of November 2005 and 4<sup>th</sup> August 2010 on security prices of firms listed in the NSE. This chapter presents the discussion of findings, conclusion and recommendations for further study

## **5.1 Conclusions**

This study applies event study methodology to provide evidence on the EMH in Nairobi Stock Exchange. More specifically the study tests the reaction of the firm's securities returns to the two constitution referendum events in Kenya held on 21<sup>st</sup> November 2005 and 4<sup>th</sup> August 2010.

According to the empirical evidence of Nairobi Stock Exchange the two 'events' tested have both positive and negative price effects. This is an indication that the two events did not have a uniform effect across the board. From the findings that the 2005 referendum event produced a higher percentage of firms with declining stock prices as compared to the 2010 event, it is prudent to conclude that the high degree of uncertainty existed after the failed 2005 referendum as compared to the successful referendum.

The evidence from the absolute Cumulative Average Abnormal Returns also confirms that the rate of increase is much higher during the 2010 event as compared to the 2005 event.

## **5.2 Recommendations**

The Kenyan case being among the few countries that have conducted a constitution referendum in Africa is of special importance. Stock exchanges in the developing markets are also slowly becoming efficient. The investors in these markets are also getting enlightened and all information will be captured into the stock prices. The fact that there was a higher percentage of stocks showing negative CAAR in 2005 than in the 2010 event confirm that investor's decisions are affected by outcomes of national events and hence should make their decisions based on rationally expected outcomes.

## **5.4 Limitations of the study**

One of the limitations of this study was the time and resource constraints. Had these not been limited, several events would have been studied and the results compared. The study was also limited in scope. Having only been conducted for the listed companies, the effect may differ from those companies not listed in the NSE.

Lack of data and data inaccuracy is also a limitation in this study. There were dates when data was not available and hence only analyzing companies that traded for more than 2/3 of the maximum trading days within the study period.

There was also uncertainty over the correct event period. The effect of the constitution referendum effect may have been felt much earlier than the period in this study.

## **5.5 Suggestions for further research**

Arising from the research findings, it would be helpful to replicate the study using other variables like the volume of shares traded during these events period. This should help confirm the true reaction by the investors during this event.

It is also important to categorize the investors into local and foreign investors to see the reaction of each group towards the two events.

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## APPENDIX 1: LETTER OF INTRODUCTION.

**Gitonga Joseph,  
School of Business,  
University of Nairobi,  
P.O. Box 30197,  
Nairobi  
10<sup>TH</sup> September, 2011**

Dear Sir/Madam

### **RE: COLLECTION OF RESEARCH DATA**

I am a student at the University of Nairobi, and I am carrying out my research study as a requirement for the fulfillment of the award of Masters in Business Administration degree.

I am conducting a case study with the sole purpose of gathering information on "The Effect of Political Risks on Stock Prices in Kenya."

The information and data obtained will be used solely for academic purposes and will be treated with a high degree of confidentiality.

Your cooperation will be highly appreciated.

Thank you.

Yours Faithfully

**Joseph Gitonga  
MBA Student,  
University of Nairobi.**

**Mr. Josephat Lishenga  
Lecturer, School of Business,  
University of Nairobi**

MARKET INVESTMENT MARKET SEGMENT	1st June - 30th June 2005			1st July - 31st July 2005			1st August - 31st August 2005			1st Sept - 30th Sept 2005			Benchmark Normal Return(NR)		
	Total	n	average	Total	n	average	Total	n	average	Total	n	average	Total	T-11-1	Normal returns(NR)
<b>AGRICULTURAL</b>															
1 Unilever Tea Kenya Ltd Ord 10.00	577.00	5.00	115.40	1616.00	14.00	119.43	1456.00	13.00	112.00	956.00	10.00	95.60	4605.00	42.00	109.64
2 Galanz Ltd Ord 5.00	360.50	7.00	51.36	1950.50	20.00	67.53	913.00	17.00	53.71	461.25	9.00	51.25	3106.25	53.00	58.59
3 Rea Vintage Plantations Ltd Ord 5.00	142.80	8.00	17.85	456.35	21.00	21.73	463.80	23.00	20.17	287.50	14.00	20.54	1390.45	66.00	20.46
4 Scaani Tea & Coffee Ltd Ord 5.00	261.25	8.00	32.65	821.25	21.00	39.11	776.25	21.00	36.96	460.25	14.00	32.88	2319.00	84.00	36.23
<b>COMMERCIAL AND SERVICES</b>															
1 Car & General (K) Ltd Ord 5.00	0.00	0.00	#DIV/0!	55.50	2.00	27.75	126.25	4.00	31.56	87.00	3.00	29.00	268.75	9.00	29.86
2 GWC Holdings Ltd Ord 5.00	421.90	8.00	52.69	971.00	19.00	51.11	1096.00	22.00	49.82	630.50	13.00	48.50	3119.00	62.00	50.31
3 Hurchings Blazer Ltd Ord 5.00	0.00	0.00	#DIV/0!	0.00	0.00	#DIV/0!	0.00	0.00	#DIV/0!	0.00	0.00	#DIV/0!	0.00	0.00	#DIV/0!
4 Kenya Airways Ltd Ord 5.00	403.75	8.00	50.47	1437.50	21.00	68.45	1614.50	23.00	70.20	1021.50	14.00	72.96	4417.25	66.00	67.84
5 Marshalls (EA) Ltd Ord 5.00	162.95	7.00	23.22	85.90	3.00	28.50	60.00	2.00	30.00	84.25	3.00	28.08	392.30	15.00	26.15
6 Nelson Media Group Ord 5.00	1586.00	8.00	198.25	4122.00	21.00	196.29	4028.00	21.00	191.81	2923.00	14.00	180.21	12259.00	64.00	191.95
7 TFS Ltd Ord 5.00 (Serena)	691.00	8.00	86.38	1347.50	17.00	79.26	1593.00	21.00	75.86	1071.00	14.00	76.50	4702.50	60.00	78.38
8 Uchumi Supermarket Ltd Ord 5.00	152.25	8.00	19.03	354.60	21.00	16.89	387.90	22.00	17.63	142.95	11.00	13.00	1037.70	62.00	16.74
<b>FINANCE AND INVESTMENT</b>															
1 Barclays Bank Ltd Ord 10.00	1979.00	8.00	247.38	5373.00	21.00	255.86	5697.00	23.00	247.70	3322.00	14.00	237.29	16371.00	66.00	248.05
2 C.F.C Bank Ltd Ord 5.00	951.90	8.00	65.19	1117.00	21.00	53.19	1342.00	20.00	67.10	768.50	11.00	69.86	3749.00	60.00	62.48
3 Diamond Trust Bank Kenya Ltd Ord 4.00	230.25	8.00	28.78	589.00	21.00	28.05	639.00	23.00	27.78	387.75	14.00	27.70	1846.00	66.00	27.97
4 Housing Finance Co Ltd Ord 5.00	111.85	8.00	13.98	284.15	21.00	13.53	301.10	23.00	13.09	170.60	14.00	12.19	867.70	66.00	13.15
5 T.C.D.C Investments Co Ltd Ord 5.00	530.00	8.00	66.25	1298.00	19.00	68.32	1587.00	23.00	69.00	977.50	14.00	69.82	4892.50	64.00	68.63
6 Jubilee Insurance Co Ltd Ord 5.00	404.50	6.00	67.42	1161.00	17.00	68.29	1359.50	20.00	67.98	781.50	11.00	71.05	3706.50	54.00	68.64
7 Kenya Commercial Bank Ltd Ord 10.00	952.50	8.00	69.06	1604.00	21.00	76.38	1854.00	23.00	80.61	1117.00	14.00	79.79	5127.50	66.00	77.69
8 National Bank of Kenya Ltd Ord 5.00	160.75	8.00	20.09	510.25	21.00	24.30	561.90	23.00	24.41	345.00	14.00	24.64	1577.50	66.00	23.90
9 NZC Bank Ltd Ord 5.00	411.00	8.00	51.38	1127.00	21.00	53.67	1216.00	23.00	52.87	720.25	14.00	51.45	3474.25	66.00	52.64
10 Non Africa Insurance Holdings Ltd Ord 5.00	122.00	4.00	30.50	558.50	15.00	37.23	499.25	13.00	38.40	361.00	9.00	40.11	1540.75	41.00	37.58
11 Standard Chartered Bank Ltd Ord 5.00	1040.00	8.00	130.00	2866.00	21.00	136.48	3075.00	22.00	139.77	1905.00	14.00	136.07	8886.00	65.00	136.71
<b>INDUSTRIAL AND ALLIED</b>															
1 Athi River Mining Ord 5.00	185.50	8.00	23.19	649.50	21.00	30.93	665.75	23.00	28.95	412.25	14.00	29.45	1913.00	66.00	28.98
2 S.O.C Kenya Ltd Ord 5.00	142.00	1.00	142.00	1439.00	10.00	143.90	1304.00	9.00	144.89	867.00	6.00	144.50	3752.00	26.00	144.31
3 Bamburi Cement Ltd Ord 5.00	964.00	8.00	120.50	2713.00	20.00	135.65	2958.00	22.00	134.45	1552.00	12.00	129.33	8187.00	62.00	132.05
4 British American Tobacco Kenya Ltd Ord 5.00	1510.00	7.00	215.71	3960.00	18.00	221.11	4258.00	20.00	212.90	2510.00	12.00	209.17	12258.00	57.00	215.05
5 Corbich Investments Ltd Ord 5.00	0.00	0.00	#DIV/0!	1372.00	11.00	124.73	1281.00	10.00	128.10	781.00	6.00	130.17	3434.00	27.00	127.19
6 Crown Beryll Ltd Ord 5.00	226.75	8.00	28.34	571.25	20.00	28.56	617.75	21.00	29.42	397.25	13.00	30.56	1813.00	62.00	29.24
7 Olympia Capital Holdings Ltd Ord 5.00	175.90	8.00	21.94	246.00	10.00	24.60	247.00	10.00	24.70	25.00	1.00	25.00	695.50	29.00	23.98
8 E.A. Cobles Ltd Ord 5.00	1065.00	8.00	133.13	2786.00	21.00	132.67	3053.00	23.00	133.74	1763.00	13.00	135.62	8667.00	65.00	133.34
9 E.A. Portland Cement Ltd Ord 5.00	994.50	8.00	74.31	2086.00	20.00	104.30	1721.00	18.00	95.61	1255.50	13.00	96.58	5607.00	59.00	95.88
10 East African Breweries Ltd Ord 7.00	1191.00	8.00	148.88	3256.00	21.00	155.05	3570.00	23.00	155.22	2046.00	14.00	146.29	10065.00	66.00	152.50
11 Somers Africa Ltd Ord 5.00	143.75	8.00	17.97	422.35	21.00	20.11	286.75	14.00	20.63	286.75	14.00	20.63	1327.95	66.00	20.12
12 Kenya Oil Co Ltd Ord 5.00	904.00	8.00	113.00	2294.00	21.00	109.24	2428.00	23.00	105.57	1460.00	13.00	112.31	7086.00	65.00	109.02
13 Mumias Sugar Co. Ltd Ord 2.00	184.75	8.00	23.09	655.75	21.00	31.23	694.50	23.00	30.20	413.00	14.00	29.50	1948.00	66.00	29.52
14 Kenya Power & Lighting Ltd Ord 20.00	889.00	8.00	111.13	2283.00	20.00	114.15	3069.00	23.00	134.30	1844.00	14.00	131.71	8105.00	65.00	124.69
15 Total Kenya Ltd Ord 5.00	336.50	8.00	42.06	896.50	21.00	42.69	893.75	23.00	38.86	548.25	14.00	39.16	2675.00	66.00	40.93
16 Unys Group Ltd Ord 5.00	147.60	8.00	18.45	361.45	20.00	18.07	401.20	23.00	17.44	238.60	14.00	17.06	1149.05	65.00	17.68
<b>ALTERNATIVE INVESTMENT MARKET SEGMENT</b>															
1 A Bourne & Co. Ltd Ord 5.00	10.70	1.00	10.70	64.25	5.00	12.85	180.40	13.00	13.88	107.75	8.00	13.47	363.10	27.00	13.45
2 City Trust Ltd Ord 5.00	324.50	6.00	54.08	672.00	12.00	56.00	556.00	10.00	55.60	219.50	4.00	54.88	1772.00	32.00	55.38
3 Ecogrids Ltd Ord 1.25	17.00	1.00	17.00	17.00	1.00	17.00	0.00	0.00	#DIV/0!	0.00	0.00	#DIV/0!	34.00	2.00	17.00
4 Express Ltd Ord 5.00	125.60	8.00	15.70	293.20	20.00	14.66	296.40	22.00	13.47	174.45	13.00	13.42	889.65	63.00	14.12
5 Williamson Tea Kenya Ltd Ord 5.00	291.00	2.00	145.50	686.00	5.00	137.20	730.00	6.00	121.67	345.00	3.00	115.00	2052.00	16.00	128.25
6 Kapchorua Tea Co. Ltd Ord 5.00	554.00	3.00	184.67	0.00	0.00	#DIV/0!	0.00	0.00	#DIV/0!	316.00	2.00	156.00	870.00	5.00	174.00
7 Kenya Orchards Ltd Ord 5.00	0.00	0.00	0.00	5.00	1.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	1.00	5.00
8 Limuru Tea Co. Ltd Ord 20.00	365.00	1.00	365.00	0.00	0.00	#DIV/0!	365.00	1.00	365.00	353.00	1.00	353.00	1083.00	3.00	361.00
9 Standard Group Ltd Ord 5.00	267.75	7.00	38.25	875.25	18.00	48.63	402.75	12.00	42.58	422.75	11.00	38.43	2076.75	48.00	43.27
<b>FIXED INCOME SECURITIES MARKET SEGMENT</b>															
<b>PREFERENCE SHARES</b>															
1 Kenya Power & Lighting Ltd 4% Pref 20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	1.00	10.00
2 Kenya Power & Lighting Ltd 7% Pref 20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	#N/A	0.00	#N/A	#N/A	0.00	#N/A
<b>NR 80 COMPANIES SELECTED</b>															

CAAR RANKING BY FIRM FOR THE EVENT PERIOD-21ST SEPT 2005-21 ST DEC 2005-APPENDIX 3

	Sep-05 21-30TH	Oct-05 1-31 ST	Nov-05 1-30TH	Dec-05 1-21ST	Cummulative Abnormal Returns(CAR)	Total Trading days	Cummulative Ave. Abnormal Returns (CAAR)
1 Kenya Power & Lighting Ltd Ord 20.00	77.15	499.54	388.85	192.31	1157.85	58.00	19.96
2 Kenya Commercial Bank Ltd Ord 10.00	34.17	231.59	419.40	465.35	1150.52	58.00	19.84
3 Kenya Oil Co Ltd Ord 0.50	68.89	200.74	213.72	240.82	724.17	54.00	13.41
4 Kenya Airways Ltd Ord 5.00	68.14	292.43	213.59	164.78	738.95	58.00	12.74
5 E.A. Portland Cement Ltd Ord 5.00	35.83	193.02	199.78	89.95	518.58	48.00	10.80
6 E.A. Cables Ltd Ord 5.00	16.31	188.25	238.58	73.62	516.75	48.00	10.77
7 Athi River Mining Ord 5.00	15.36	113.27	172.04	143.71	444.38	58.00	7.66
8 Bamburi Cement Ltd Ord 5.00	15.66	93.13	127.08	103.37	339.24	57.00	5.95
9 Crown Berger Ltd Ord 5.00	20.31	127.15	86.61	65.35	299.41	51.00	5.87
0 National Bank of Kenya Ltd Ord 5.00	27.69	91.52	93.87	66.13	279.21	58.00	4.81
1 Mumias Sugar Co. Ltd Ord 2.00	16.89	44.48	45.21	44.54	151.12	58.00	2.61
2 I.C.D.C Investments Co Ltd Ord 5.00	10.07	31.11	40.24	38.77	120.20	55.00	2.19
3 Standard Chartered Bank Ltd Ord 5.00	-15.95	20.26	42.55	20.09	66.95	57.00	1.17
4 Total Kenya Ltd Ord 5.00	-3.46	41.95	2.42	8.08	48.99	58.00	0.84
5 Rea Vipingo Plantations Ltd Ord 5.00	-1.83	15.45	4.23	8.54	26.39	58.00	0.46
6 Diamond Trust Bank Kenya Ltd Ord 4.00	-7.32	-6.95	-6.67	44.67	23.73	57.00	0.42
7 Unga Group Ltd Ord 5.00	0.81	-1.30	-7.28	16.06	8.29	58.00	0.14
8 TPS Ltd Ord 5.00 (Serena)	-7.63	20.75	109.25	0.00	122.38	43.00	0.00
9 Jubilee Insurance Co. Ltd Ord 5.00	12.67	48.42	126.78	193.19	381.06	49.00	0.00
0 Sameer Africa Ltd Ord 5.00	-1.09	-9.62	-15.99	21.56	-5.14	58.00	-0.09
1 Housing Finance Co Ltd Ord 5.00	-12.33	-15.60	6.21	6.79	-14.92	58.00	-0.26
2 Express Ltd Ord 5.00	-2.25	-6.49	-8.76	-5.63	-23.12	57.00	-0.41
3 CMC Holdings Ltd Ord 5.00	-17.90	-36.02	-5.07	5.21	-53.77	58.00	-0.93
4 Barclays Bank Ltd Ord 10.00	-62.32	-49.82	17.14	35.36	-59.64	58.00	-1.03
5 NIC Bank Ltd Ord 5.00	-24.73	-27.63	-46.41	-28.46	-127.24	57.00	-2.23
6 Standard Group Ltd Ord 5.00	-16.83	-48.77	-23.61	0.34	-88.86	39.00	-2.28
7 Uchumi Supermarket Ltd Ord 5.00	-29.82	-42.37	-53.90	-39.02	-165.11	43.00	-3.84
8 Sasini Tea & Coffee Ltd Ord 5.00	-23.64	-87.97	-72.47	-81.53	-265.61	57.00	-4.66
9 British American Tobacco Kenya Ltd Ord 10	-25.32	-58.84	-49.95	-132.74	-266.84	54.00	-4.94
0 Nation Media Group Ord. 5.00	-65.28	-162.84	-92.39	-34.66	-355.17	57.00	-6.23
1 Kakuzi Ord 5.00	-65.04	-116.24	-148.84	-101.65	-431.76	42.00	-10.28
2 East African Breweries Ltd Ord 2.00	-26.50	-234.00	-276.50	-225.00	-762.00	58.00	-13.14
3 C.F.C Bank Ltd ord 5.00	51.12	144.78	117.67	-1716.45	-1402.89	43.00	-32.63

\* All the companies selected for analysis as those whose stock was traded for more than 2/3 of the trading days(2/3\*58)=38

CAAR BY SECTOR FOR THE EVENT PERIOD=21ST SEPT 2005-21 ST DEC 2005-APPENDIX 4

MAIN INVESTMENT MARKET SEGMENT		Sep-05	Oct-05	Nov-05	Dec-05	Cumulative	Total	Cumulative
AGRICULTURAL		21-30TH	1-31 ST	1-30TH	1-21ST	Abnormal Returns(CAR)	Trading days	Ave Abnormal Returns (CAAR)
1	Rea Vipingo Plantations Ltd Ord 5.00	-1.83	15.45	4.23	8.54	26.39	58.00	0.46
2	Sasini Tea & Coffee Ltd Ord 5.00	-23.64	-87.97	-72.47	-81.53	-265.61	57.00	-4.66
3	Kakuzi Ord.5.00	-65.04	-116.24	-148.84	-101.65	-431.76	42.00	-10.28
<b>COMMERCIAL AND SERVICES</b>								
1	Kenya Airways Ltd Ord 5.00	68.14	292.43	213.59	164.78	738.95	58.00	12.74
2	TPS Ltd Ord 5.00 (Serena)	-7.63	20.75	109.25	0.00	122.38	43.00	0.00
3	CMC Holdings Ltd Ord 5.00	-17.90	-36.02	-5.07	5.21	-53.77	58.00	-0.93
4	Uchumi Supermarket Ltd Ord 5.00	-29.82	-42.37	-53.90	-39.02	-165.11	43.00	-3.84
5	Nation Media Group Ord 5.00	-65.28	-162.84	-92.39	-34.66	-355.17	57.00	-6.23
<b>FINANCE AND INVESTMENT</b>								
1	Kenya Commercial Bank Ltd Ord 10.00	34.17	231.59	419.40	465.35	1150.52	58.00	19.84
2	National Bank of Kenya Ltd Ord 5.00	27.69	91.52	93.87	66.13	279.21	58.00	4.81
3	I C D C Investments Co Ltd Ord 5.00	10.07	31.11	40.24	38.77	120.20	55.00	2.19
4	Standard Chartered Bank Ltd Ord 5.00	-15.95	20.26	42.55	20.09	66.95	57.00	1.17
5	Diamond Trust Bank Kenya Ltd Ord 4.00	-7.32	-6.95	-6.67	44.67	23.73	57.00	0.42
6	Jubilee Insurance Co Ltd Ord 5.00	12.67	48.42	126.78	193.19	381.06	49.00	0.00
7	Housing Finance Co Ltd Ord 5.00	-12.33	-15.60	6.21	6.79	-14.92	58.00	-0.26
8	Barclays Bank Ltd Ord 10.00	-62.32	-49.82	17.14	35.36	-59.64	58.00	-1.03
9	NIC Bank Ltd Ord 5.00	-24.73	-27.63	-46.41	-28.46	-127.24	57.00	-2.23
10	CFC Bank Ltd ord 5.00	51.12	144.78	117.67	-1716.45	-1402.89	43.00	-32.63
<b>INDUSTRIAL AND ALLIED</b>								
1	Kenya Power & Lighting Ltd Ord 20.00	77.15	499.54	388.85	192.31	1157.85	58.00	19.96
2	Kenya Oil Co Ltd Ord 0.50	68.89	200.74	213.72	240.82	724.17	54.00	13.41
3	E A Portland Cement Ltd Ord 5.00	35.83	193.02	199.78	89.95	518.58	48.00	10.80
4	E A Cables Ltd Ord 5.00	16.31	188.25	238.58	73.62	516.75	48.00	10.77
5	Athi River Mining Ord 5.00	15.36	113.27	172.04	143.71	444.38	58.00	7.66
6	Bamburi Cement Ltd Ord 5.00	15.66	93.13	127.08	103.37	339.24	57.00	5.95
7	Crown Berger Ltd Ord 5.00	20.31	127.15	86.61	65.35	299.41	51.00	5.87
8	Mumias Sugar Co. Ltd Ord 2.00	16.89	44.48	45.21	44.54	151.12	58.00	2.61
9	Total Kenya Ltd Ord 5.00	-3.46	41.95	2.42	8.08	48.99	58.00	0.84
10	Unga Group Ltd Ord 5.00	0.81	-1.30	-7.28	16.06	8.29	58.00	0.14
11	Sameer Africa Ltd Ord 5.00	-1.09	-9.62	-15.99	21.56	-5.14	58.00	-0.09
12	British American Tobacco Kenya Ltd Ord 10.00	-25.32	-58.84	-49.95	-132.74	-266.84	54.00	-4.94
13	East African Breweries Ltd Ord 2.00	-26.50	-234.00	-276.50	-225.00	-762.00	58.00	-13.14
<b>ALTERNATIVE INVESTMENT MARKET SEGMENT</b>								
1	Express Ltd Ord 5.00	-2.25	-6.49	-8.76	-5.63	-23.12	57.00	-0.41
2	Standard Group Ltd Ord 5.00	-16.83	-48.77	-23.61	0.34	-88.86	39.00	-2.28

\* All the companies selected for analysis as those whose stock was traded for more than 2/3 of the trading days(2/3\*58)=38





CAAR RANKING BY FIRM FOR THE EVENT PERIOD-4TH JUNE 2010-3 RD SEPT 2010-APPENDIX 6

	Jun-10	Jul-10	Aug-10	Sep-10	Cumulative Abnormal Returns(CAR)	Total Trading days	Cumulative Ave. Abnormal Returns (CAAR)
	4-30TH	1-31 ST	1-31ST	1-3RD			
1 Standard Chartered Bank Ltd Ord 5.00	362.92	900.54	1316.92	161.62	2742.00	63.00	43.52
2 British American Tobacco Kenya Ltd Ord	249.87	696.80	1134.40	197.40	2278.47	61.00	37.35
3 Athi River Mining Ord 5.00	346.03	641.77	880.03	145.74	2013.58	63.00	31.96
4 CFC Stanbic Holdings Ltd ord.5.00	401.88	696.18	736.88	115.80	1950.75	63.00	30.96
5 Carbacid Investments Ltd Ord 5.00	242.28	453.52	356.34	82.93	1135.07	55.00	20.64
6 Kenya Power & Lighting Co Ltd Ord 20.00	319.37	290.32	442.37	68.95	1121.00	63.00	17.79
7 E.A.Portland Cement Ltd Ord 5.00	227.71	174.90	261.81	16.45	680.87	46.00	14.80
8 Diamond Trust Bank Kenya Ltd Ord 4.00	125.23	223.42	451.23	87.69	887.56	63.00	14.09
9 East African Breweries Ltd Ord 2.00	235.49	283.25	292.49	32.76	844.00	63.00	13.40
10 Jubilee Holdings Ltd Ord 5.00	173.53	-2.05	525.67	91.42	788.56	61.00	12.93
11 Scangroup Ltd Ord 1.00	127.70	207.65	302.20	74.20	711.75	63.00	11.30
12 Bamburi Cement Ltd Ord 5.00	130.80	167.30	162.40	24.90	485.40	57.00	8.52
13 Barclays Bank Ltd Ord 2.00	75.78	206.48	203.28	28.20	513.75	63.00	8.15
14 Nation Media Group Ord. 2.50	14.29	85.86	261.43	57.57	419.14	62.00	6.76
15 Equity Bank Ltd Ord 0.50	108.82	117.87	134.32	22.55	383.55	63.00	6.09
16 Centum Investment Co Ltd Ord 0.50	86.61	111.94	139.46	20.48	358.50	63.00	5.69
17 Williamson Tea Kenya Ltd Ord 5.00	282.56	134.28	-131.89	-14.28	270.67	48.00	5.64
The Co-operative Bank of Kenya Ltd Ord 1	56.68	80.91	106.53	16.03	260.15	63.00	4.13
NIC Bank Ltd Ord 5.00	23.97	46.14	133.72	29.17	233.00	63.00	3.70
Housing Finance Co Ltd Ord 5.00	33.92	43.62	106.17	14.45	198.15	63.00	3.15
Crown Berger Ltd Ord 5.00	-6.55	15.03	92.09	15.83	116.39	59.00	1.97
Kakuzi Ord.5.00	5.97	12.97	58.17	15.19	92.31	56.00	1.65
KenGen Ltd Ord. 2.50	25.09	31.65	38.64	4.51	99.90	63.00	1.59
Mumias Sugar Co. Ltd Ord 2.00	23.28	21.64	42.33	3.31	90.55	63.00	1.44
Unga Group Ltd Ord 5.00	14.61	19.72	36.36	3.65	74.35	63.00	1.18
CMC Holdings Ltd Ord 0.50	7.88	-5.07	1.63	0.55	5.00	55.00	0.09
Safaricom Ltd Ord 0.05	1.56	3.92	-0.89	-2.48	2.10	63.00	0.03
AccessKenya Group Ltd Ord. 1.00	-20.67	22.84	1.53	-5.14	-1.45	63.00	-0.02
Sasini Ltd Ord 1.00	2.01	-4.63	-0.49	-2.44	-5.55	63.00	-0.09
Standard Group Ltd Ord 5.00	-28.84	-39.04	39.05	10.98	-17.84	57.00	-0.31
Eveready East Africa Ltd Ord.1.00	-7.02	-11.74	-5.96	-1.47	-26.19	62.00	-0.42
Imameer Africa Ltd Ord 5.00	-8.41	-13.72	-3.06	-2.26	-27.45	63.00	-0.44
PS Eastern Africa (Serena) Ltd Ord 1.00	55.38	-29.19	-59.12	-0.57	-33.50	63.00	-0.53
Postal Kenya Ltd Ord 5.00	-24.06	-15.75	3.94	1.21	-34.65	62.00	-0.56
Lympha Capital Holdings Ltd Ord 5.00	-7.74	-26.65	-20.09	-4.11	-58.60	63.00	-0.93
Kenya Re-Insurance Corporation Ltd Ord 2	-19.59	-35.05	-11.99	-3.31	-69.95	63.00	-1.11
Express Ltd Ord 5.00	-21.11	-30.94	-6.17	-1.19	-59.42	53.00	-1.12
Unga Vipinga Plantations Ltd Ord 5.00	-31.59	-32.18	-21.62	-4.99	-90.38	61.00	-1.48
A.Cables Ltd Ord 0.50	-18.86	-37.80	-49.31	-11.04	-117.00	63.00	-1.86
Kenya C Ltd Ord 5.00	-96.25	-63.32	51.68	-2.04	-109.92	49.00	-2.24
Kenya Commercial Bank Ltd Ord 1.00	-37.47	-78.47	-52.77	-8.15	-176.85	63.00	-2.81
National Bank of Kenya Ltd Ord 5.00	-122.18	-144.16	-81.11	-17.98	-365.42	62.00	-5.89
Kenya Airways Ltd Ord 5.00	-148.21	-227.52	-140.96	-29.06	-545.75	63.00	-8.66

The companies selected for analysis as those whose stock was traded for more than 2/3 of the trading days(2/3\*63=42).

CAAR RANKING BY SECTOR THE EVENT PERIOD-4TH JUNE 2010-3 RD SEPT 2010 APPENDIX 7

MAIN INVESTMENT MARKET SEGMENT						Cumulative Abnormal Returns(CAR)	Total Trading days	Cumulative Ave. Abnormal Returns (CAAR)
	Jun-10 4-30TH	Jul-10 1-31 ST	Aug-10 1-31ST	Sep-10 1-3RD				
<b>AGRICULTURAL</b>								
1	Kakuzi Ord 5.00	5.97	12.97	58.17	15.19	92.31	56.00	1.65
2	Sasini Ltd Ord 1.00	2.01	-4.63	-0.49	-2.44	-5.55	63.00	-0.09
3	Rea Vipingo Plantations Ltd Ord 5.00	-31.59	-32.18	-21.62	-4.99	-90.38	61.00	-1.48
<b>COMMERCIAL AND SERVICES</b>								
1	Scangroup Ltd Ord 1.00	127.70	207.65	302.20	74.20	711.75	63.00	11.30
2	Nation Media Group Ord. 2.50	14.29	85.86	261.43	57.57	419.14	62.00	6.76
3	CMC Holdings Ltd Ord 0.50	7.88	-5.07	1.63	0.55	5.00	55.00	0.09
4	Safaricom Ltd Ord 0.05	1.56	3.92	-0.89	-2.48	2.10	63.00	0.03
5	AccessKenya Group Ltd Ord. 1.00	-20.67	22.84	1.53	-5.14	-1.45	63.00	-0.02
6	Standard Group Ltd Ord 5.00	-28.84	-39.04	39.05	10.98	-17.84	57.00	-0.31
7	TPS Eastern Africa (Serena) Ltd Ord 1.00	55.38	-29.19	-59.12	-0.57	-33.50	63.00	-0.53
8	Kenya Airways Ltd Ord 5.00	-148.21	-227.52	-140.96	-29.06	-545.75	63.00	-8.66
<b>FINANCE AND INVESTMENT</b>								
1	Standard Chartered Bank Ltd Ord 5.00	362.92	900.54	1316.92	161.62	2742.00	63.00	43.52
2	CFC Stanbic Holdings Ltd ord.5.00	401.88	696.18	736.88	115.80	1950.75	63.00	30.96
3	Diamond Trust Bank Kenya Ltd Ord 4.00	125.23	223.42	451.23	87.69	887.56	63.00	14.09
4	Jubilee Holdings Ltd Ord 5.00	173.53	-2.05	525.67	91.42	788.56	61.00	12.93
5	Barclays Bank Ltd Ord 2.00	75.78	206.48	203.28	28.20	513.75	63.00	8.15
6	Equity Bank Ltd Ord 0.50	108.82	117.87	134.32	22.55	383.55	63.00	6.09
7	Centum Investment Co Ltd Ord 0.50	86.61	111.94	139.46	20.48	358.50	63.00	5.69
8	The Co-operative Bank of Kenya Ltd Ord	56.68	80.91	106.53	16.03	260.15	63.00	4.13
9	NIC Bank Ltd Ord 5.00	23.97	46.14	133.72	29.17	233.00	63.00	3.70
10	Housing Finance Co Ltd Ord 5.00	33.92	43.62	106.17	14.45	198.15	63.00	3.15
11	Olympia Capital Holdings Ltd Ord 5.00	-7.74	-26.65	-20.09	-4.11	-58.60	63.00	-0.93
12	Kenya Re-Insurance Corporation Ltd Ord	-19.59	-35.05	-11.99	-3.31	-69.95	63.00	-1.11
13	Kenya Commercial Bank Ltd Ord 1.00	-37.47	-78.47	-52.77	-8.15	-176.85	63.00	-2.81
14	National Bank of Kenya Ltd Ord 5.00	-122.18	-144.16	-81.11	-17.98	-365.42	62.00	-5.89
<b>INDUSTRIAL AND ALLIED</b>								
	British American Tobacco Kenya Ltd Ord	249.87	696.80	1134.40	197.40	2278.47	61.00	37.35
	Athi River Mining Ord 5.00	346.03	641.77	880.03	145.74	2013.58	63.00	31.96
	Carbacid Investments Ltd Ord 5.00	242.28	453.52	356.34	82.93	1135.07	55.00	20.64
	Kenya Power & Lighting Co Ltd Ord 20.00	319.37	290.32	442.37	68.95	1121.00	63.00	17.79
	E.A. Portland Cement Ltd Ord 5.00	227.71	174.90	261.81	16.45	680.87	46.00	14.80
	East African Breweries Ltd Ord 2.00	235.49	283.25	292.49	32.76	844.00	63.00	13.40
	Bamburi Cement Ltd Ord 5.00	130.80	167.30	162.40	24.90	485.40	57.00	8.52
	Crown Berger Ltd Ord 5.00	-6.55	15.03	92.09	15.83	116.39	59.00	1.97
	KenGen Ltd Ord 2.50	25.09	31.65	38.64	4.51	99.90	63.00	1.59
	Mumias Sugar Co. Ltd Ord 2.00	23.28	21.64	42.33	3.31	90.55	63.00	1.44
	Unga Group Ltd Ord 5.00	14.61	19.72	36.36	3.65	74.35	63.00	1.18
	Eveready East Africa Ltd Ord.1.00	-7.02	-11.74	-5.96	-1.47	-26.19	62.00	-0.42
	Sameer Africa Ltd Ord 5.00	-8.41	-13.72	-3.06	-2.26	-27.45	63.00	-0.44
	Total Kenya Ltd Ord 5.00	-24.06	-15.75	3.94	1.21	-34.65	62.00	-0.56
	E.A. Cables Ltd Ord 0.50	-18.86	-37.80	-49.31	-11.04	-117.00	63.00	-1.86
	B.O.C Kenya Ltd Ord 5.00	-96.25	-63.32	51.68	-2.04	-109.92	49.00	-2.24
<b>ALTERNATIVE INVESTMENT MARKET SEGMENT</b>								
	Williamson Tea Kenya Ltd Ord 5.00	282.56	134.28	-131.89	-14.28	270.67	48.00	5.64
	Express Ltd Ord 5.00	-21.11	-30.94	-6.17	-1.19	-59.42	53.00	-1.12

All the companies selected for analysis as those whose stock was traded for more than 2/3 of the trading days (2/3\*63=42).

SUMMARY OF STOCK PERFORMANCE IN 2005 AND 2010

TABLE 1

CAAR BY SECTOR FOR THE 2005 REFERENDUM EVENT					
SECTOR	NO. OF COMPANIES	-VE CAAR	+VE CAAR	%-VE CAAR	%+VE CAAR
AGRICULTURAL	3	2	1	66.67%	33.33%
COMMERCIAL AND SERVICES	5	3	2	60.00%	40.00%
FINANCE AND INVESTMENT	10	4	6	40.00%	60.00%
INDUSTRIAL AND ALIENATED	13	3	10	23.08%	76.92%
ALTERNATIVE INVESTMENT	2	2	0	100.00%	0.00%
TOTAL	33	14	19	42.42%	57.58%

TABLE 2

CAAR BY SECTOR FOR THE 2010 REFERENDUM EVENT					
SECTOR	NO. OF COMPANIES	-VE CAAR	+VE CAAR	%-VE CAAR	%+VE CAAR
AGRICULTURAL	3	2	1	66.67%	33.33%
COMMERCIAL AND SERVICES	8	4	4	50.00%	50.00%
FINANCE AND INVESTMENT	14	4	10	28.57%	71.43%
INDUSTRIAL AND ALIENATED	16	5	11	31.25%	68.75%
ALTERNATIVE INVESTMENT	2	1	1	50.00%	50.00%
TOTAL	43	16	27	37.21%	62.79%

TABLE 3

CAAR BY SECTOR FOR THE TWO REFERENDUM EVENTS					
	NO. OF COMPANIES	-VE CAAR	+VE CAAR	%-VE CAAR	%+VE CAAR
Event 2005	33	14	19	42.42%	57.58%
Event 2010	43	16	27	37.21%	62.79%
TOTAL	76	30	46	39.47%	60.53%