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## DECLARATION

This Management Project is my own original work and has not been presented for a degree in any other University.


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This Management Project has been submitted for examination with my approval as the University Supervisor.


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## DEDICATION

To my parents, my wife Lois, son David and daughter Abigail With all my love

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#### Abstract

Stock markets in the world individually and collectively play a critical role in most national economies and also at the global level. They provide cash, futures, options, and other forms of derivatives which provide profitable opportunities for investors.


The performance of stock market is influenced by a number of factors key among them the activities of governments and the general performance of the economy.
Various studies have been carried out in America and Britain examining the performance of stock markets in these countries before and after elections. They have also examined the performance of the stock markets based on the party of the president or Prime Minister in the in power. These studies indicated that the stock market react differently based on the party of the president elected in America while there was no much difference in Britain.

This study analysed the performance of Nairobi Stock Exchange before and after the last four general elections in Kenya. The study focused on the NSE performance before and after the 1992, 1997, 2002 and 2007 elections. The NSE month end indices for the period between $31^{\text {st }}$ January 1991 and $30^{\text {th }}$ September 2008 obtained from the NSE were analysed using line graphs, percentages, mean, variance and other statistical measures.

The study results indicate the NSE performance was influenced by the political activities and expectations around the election period in the short term. The study also reveals that the first two years after the general elections the NSE performed better than the last two years before the next general elections. The poor performance before the election could be attributed to investor anxiety and panic associated with pre-election period.

The lessons from this study as well as the recommendations for the future is that investors should be cautious of the investments they undertake before the general election - whose returns could be eroded by the after-effects of the general elections. The pre-election period is thus not conducive for short-term investment. Investments undertaken in stock market in pre-election years should be geared towards realization of returns in post-election period, assuming the political environment is favourable

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## CHAPTER ONE

### 1.0 INTRODUCTION

### 1.1 Background

Stock markets in the world individually and collectively play a critical role in most national economies and also at the global level. They provide cash, futures, options, and other forms of derivatives which provide profitable opportunities for investors. These markets perform a wide range of economic and political functions while offering trading, investment, speculation, hedging, and arbitrage opportunities. They serve as mechanisms for price discovery and information dissemination but also provide vehicles for raising finances for companies and are frequently pivotal elements in the success of financial centers. They are used to implement privatization programmes, and they often play an important role in the development of emerging economies (Lee, 1998).

The performance of stock market is influenced by a number of factors key among them the activities of governments and the general performance of the economy. Monetary and fiscal measures enacted by various agencies of national governments influence the aggregate economies of those countries. The resulting economic conditions influence all industries and companies within the economies positively or negatively. These in turn affect the performance of stock markets. Other factors that affect stock market performance include; availability of other investment assets, changes in composition of investors, and market sentiments among other factors (Mendelson, 1976).

Various authors have examined the immediate market reaction to the presidential elections. Studies using various event methodologies have provided consistent evidence that the immediate market reaction to the election of a Republican president is positive (increase in stock index) while the election of a Democratic president creates a negative (decrease I stock index) market reaction (Siegel, 1998 and Riley, 1980). The party effect, in which popular wisdom asserts that the stock market prefers Republican presidents to

Democrats, turns out to be false. Indeed the evidence supports the opposite proposition in that stocks perform better under Democratic presidents than under Republicans (Jones, 2002).

In Kenya, dealing in shares and stocks started in the 1920's when the country was still a British Colony. There was however no formal market, no rules and no regulations to govern stock broking activities. Trading took place on gentlemen's agreement in which standard commissions were charged with clients being obligated to honour their contractual commitments of making good delivery and settling relevant costs. In 1951 an Estate Agent by the name of Francis Drummond established the first professional Stockbroking firm. He also approached the then finance minister of Kenya, Sir Ernest Vasey and impressed upon him the idea of setting up a stock exchange in East Africa. The two approached London Stock Exchange officials in July of 1953 and the London officials accepted to recognise the setting up of the Nairobi Stock Exchange as an overseas stock exchange (Muga, 1974).

The Nairobi Stock Exchange was constituted as a voluntary association of stockbrokers registered under the Societies Act in 1954. In 1991 the Nairobi Stock Exchange was incorporated under the Companies Act of Kenya in as a company limited by guarantee and without a share capital. Currently, sixteen (16) stockbrokers and four (4) investment banks form the membership of the NSE. There are sixty two companies listed at the NSE and a number of Treasury and Corporate bonds (www.nse.co.ke).

The elections which gave rise to the first independence Kenyan government were held in May 1963, under the supervision of the then colonial government. The 1969, 1974, 1979, 1983 and 1988 were held under the one party system. The 1992, 1997 and 2002 were held under the multi-party system after the constitution was changed in 1991 to reintroduce multi-party system in Kenya (Commonwealth, 2006).

### 1.2 Statement of the Problem

A number of studies have been undertaken establishing the relationship between the performances of stock exchanges in the world and political activities in specific countries. Most of these studies are carried out in developed stock exchanges as detailed in the section on implications of general elections on performance of stock markets. Such studies are lacking on emerging markets and the stock market in Kenya. This implies that investors, policy makers, researchers among others do not have the benefits such research would provide to them.

Studies on the effect of political activities on the performance of emerging capital markets are very important as more and more people invest in these markets. The investors in emerging markets are local and the number of foreign investors is increasing. Investors in emerging markets can not rely on the studies in developed stock markets since they operate in different social, economic and political environments than those found in emerging markets.

The performance of the stock market following general elections and its relationship with market performance has been documented in the United Kingdom and the United States of America (Stovall 1992, Hudson et.al, 1998). No known study has been undertaken in Kenya on the performance of NSE before and after general elections and determination of the effect of the general elections on the NSE performance.

### 1.3 Objective of the Study

- To analyze the performance of NSE before and after general election


### 1.4 Importance of the Study

This study will be useful to the following market players;

- Academicians - The study will give good insight to scholars who want to do further research on the performance of stock markets and factors influencing their performance
- Capital Market Authority (CMA)- The study will provide information to be used to educate the general public to understand the performance of NSE during general election periods. This will help them make better investment decisions.
- Nairobi Stock Exchange (NSE) - The study will provide information to NSE management as to how the NSE performs during election periods. The information can be used to make policy proposals to the Capital Market Authority.
- Stock Brokers and Investment Banks- The study will help Stock Brokers and Investment Banks in advising their clients on investments strategies during general election periods.
- Investors- The study will give investors useful information concerning the likely performance of NSE during general election periods. This will assist them in determining their investment decision through the NSE.
- Government- The study will provide information that can be used by the government to determine the timing of privatization of state corporations through the NSE.


## CHAPTER TWO

### 2.0 LITERATURE REVIEW

### 2.1 Stock Market

A stock market is an institution that deals in the exchange of securities issued by publicly quoted companies and the Government. The stock market is part of the broader market referred to as the financial market. A financial market is a market where financial assets or financial instruments are traded and these instruments entitle the holder to a claim to future cash. The entity that agrees to make future cash payment is called the issuer of the financial assets; the owner of the financial asset is referred to as the investor (Fabozzi, 1995).

The claim that the holder of a financial asset is entitled may be either a fixed dollar amount or varying or residual amount. In the former case, the financial asset is referred to as a debt instrument. An equity claim (also called residual claim) obligates the issuer of the financial asset to pay the holder an amount based on earnings if any, after holders of debt instruments have been paid. Common stock is an example of an equity claim. Both debt and preferred stock that pay a fixed income are called fixed income instruments (Reilly 1997).

An overview of the classifications of financial markets provides a better understanding of the relationship between the stock market and financial market. There are many ways to classify financial markets. Financial market in which debt instruments are traded is referred to as debt market while the market in which equity instruments are traded is an equity market. A market where debt instruments and preferred stocks are traded is referred to as fixed income securities market. The sector of stock market that does not include preferred stock is called common stock market. Financial markets may also be classified in-terms of the maturity of the claims. A financial market for short term financial assets maturing within one year is called money market and one for one for
longer maturity financial assets called the capital market. The market for newly issued financial assets is called the primary market while the market in which they are traded after issue is referred to as the secondary market. Financial markets can also be classified by organizational structure namely auction market, over the counter markets and intermediation markets (Fabozzi, 1995).

### 2.2 The Role of the Stock Markets

The major role that the stock markets have played, and continues to play in many economies is that they promote a culture of thrift, or saving. The very fact that institutions exist where savers can safely invest their money and in addition earn a return, is an incentive to people to consume less and save more. The stock market contributes to increase in the level of saving in the country. The growth of related financial services sector such as unit trusts, investment clubs, insurance, pension and provident fund schemes which nurture the spirit of savings Stock markets assist in the transfer of savings to investment in productive enterprises as an alternative to keeping the savings idle. It should be appreciated that in as much as an economy can have savings, the lack of established mechanisms for channeling those savings into activities that create wealth would lead to mis-allocation or waste of those savings. Therefore, encouraging a culture of saving in less developed financial markets may lead to economic stagnation (www.nse.co.ke).

A robust stock market assists in the rational and efficient allocation of capital, which is a scarce resource. The fact that capital is scarce means systems have to be developed where capital goes to the most deserving user. An efficient stock market sector will have the expertise, the institutions and the means to prioritize access to capital by competing users so that an economy manages to realize maximum output at least cost. This is what economists refer to as the optimum production level. If an economy does not have efficient financial markets, there is always the risk that scarce capital could be channeled to non-productive investments as opposed to productive ones, leading to wastage of resources and economic decline (Lee, 1998).

The existence of stock markets promotes higher standards of accounting, resource management and transparency in the management of business. This is because financial markets encourage the separation of owners of capital, on the one hand, from managers of capital, on the other. This separation is important because people who have the money may not necessarily have the best business ideas, and people with the best ideas may not have the money. And because the two need each other, the stock exchange becomes the all-important link. A private company in need of capital for expansion can approach the Capital Market Authority and the Nairobi Stock Exchange to raise funds through an Initial Public Offer. This arrangement benefits both parties because the manager of capital, who is the entrepreneur, is able to access to capital to turn his idea into a reality, while the owners of capital, who are the shareholders, receive a return on their investment without having to report for work at that company (www.nse.co.ke).

Improving access to finance of different types of users by providing the flexibility for customization is an important role of the stock market. This is made possible as the financial sector allows the different users of capital to raise capital in ways that are suited to meeting their specific needs. For example, established companies can raise short term finance through commercial paper; small companies can raise long term capital by selling shares; the Government and even municipal councils can raise funds by floating various types of bonds as an alternative to foreign borrowing (www.nse.co.ke).

Investors are provided with an efficient mechanism to liquidate their investments in securities through stock markets. The very fact that investors are certain of the possibility of selling out what they hold, as and when they want, is a major incentive for investment as it guarantees mobility of capital in the purchase of assets. The interactions of buyers and sellers in a stock market determine the price of traded assets; or, equivalently, the required return on a financial asset. The inducement for firms to acquire funds depends on the required return that investors demand, and it is this future of stock market that signals how funds in the economy should be allocated among financial assets. This is called the price discovery process (Fabozzi, 1995).

Reduction of the search and information costs of transacting at the stock market is key to facilitating growth of the market. Search costs represent explicit costs, such as money spent to advertise the desire to sell or purchase a financial asset, and implicit costs, such as the value of the time spent in locating counterparty. The presence of some form of organized stock market reduces search costs. Information costs are those entailed with assessing the investment merits of a financial asset; that is, the amount and the likelihood of the cash flow expected to be generated (Fabozzi, 1995).

Stock market facilitates equity financing as opposed to debt financing. Companies can raise equity through initial public offers; secondary offers or rights issues all made possible through the stock markets. Debt financing has been the undoing of many enterprises in both developed and developing countries especially in recessionary periods. At times a company in need of funds for expansion may not be able to use debt financing if it has a high debt to equity ratio and hence equity financing provides a solution in such cases (www.nse.co.ke).

Avenues for public floatation of private companies and government owned entities which in turn allow greater growth and increase of the supply of assets available for long-term investment are available at the stock market. This also leads to wealth redistributions from state and private companies to the investing public since they can share in the returns of the privatized entities. The establishment of an efficient stock market is, therefore, indispensable for any economy that is keen on using scarce capital resources to achieve economic growth (www.nse.co.ke).

### 2.3 Stock Market Performance Indicators

The prices of stocks around the world do not move together in an exact manner. This is because the economic systems in which stock markets are located have dissimilar environments in terms of taxation, industrial growth, political stability and monetary policies among other factors. Stock markets may experience a general increase in price level referred to as a bull market, general decrease in price level referred to as a bear
market, stagnant prices or sudden big price movements downward referred to as market crash .

There are many stock markets indexes that chart and measure the performance of the various stock markets. In every country where stock trading takes place, there is at least one index that measures general price movements. If a country has more than once stock exchange, each exchange usually has its own index. Also, new organizations and financial advisory services create indexes (Fabozzi, 1995).

Stock Market index is one of the most widely used measures of stock performance. Investors hold portfolios of many assets, but it is cumbersome to follow progress on each security in the portfolio. It is prudent therefore to observe the entire market under the notion that their portfolio moved the same direction as the aggregate market. The market index such as the NSE index is used to observe total returns for an aggregate market and these computed returns are to judge performance of individual portfolios. The assumption is that randomly selecting a large number of stocks from the total market, the investor should be able to experience a rate of return comparable to the market (Simiyu, 1992).

Market capitalization is another measure of stock market performance. It is used to measure market movements; it measures the total value of stocks in a particular stock market by aggregating the market value of the stocks. The market stock price of each share is multiplied by outstanding shares and market values of all stocks added to obtain the market capitalization. Changes in market capitalization occur due to fluctuations in share prices or issuance of new shares or bonus and this implies more activity at the stock market that may signal more investment taking place. Market turnover shows cash inflows and outflows in the stock market. It is based on the actively traded shares and a change occurs due to fluctuation in share prices or number of shares traded in a given day (Otuke, 2006).

### 2.4 Determinants of Performance of Stock Markets

The performance of stock markets is influenced by a number of factors key among them the activities of governments and the general performance of the economy. Monetary and fiscal measures enacted by various agencies of national governments influence the aggregate economies of those countries. The resulting economic conditions influence all industries and companies within the economies positively or negatively. These in turn affect the performance of stock markets (Reilly, 1997).

Fiscal policy incentives such as tax cuts can encourage spending, whereas additional taxes on income, petroleum products, cigarettes, and alcoholic beverages discourage spending. Increase or decreases in government spending on defense, training programs or on infrastructure also influence the general economy. All such policies influence the business environment for the firms that rely directly on those expenditures. In addition, government spending has a strong multiplier effect. For example, increases in road construction increases the demand for earthmoving equipment and road construction materials. As a result in addition to construction workers, the employees in those industries that supply the equipment and materials have more to spend on consumer goods, which raises the demand for consumer goods, which affect another set of suppliers (Stiglitz, 1993).

Monetary policy produces similar economic changes. A restrictive monetary policy that reduces the growth rate of money supply reduces the supply of funds for working capital and expansion of businesses. Alternatively, a restrictive monetary policy that targets interest rates would raise the market interest rates and therefore the firm's cost of capital, and make it more expensive for individuals to finance home mortgage and purchase of other durable goods such as vehicles and electronic appliances. Monetary policy therefore affects all segments of the economy including the stock markets and that economy's relationship with other economies (Mendelson, 1976).

Inflation is another factor that affects the performance of stock markets. Inflation causes differences between real and nominal interest rates and changes the spending and saving behavior of consumers and corporations. Unexpected changes in the rate of inflation make it difficult for firms to plan, which inhibits growth and innovations. Beyond the impact of the domestic economy, differential inflation and interest rates influence the trade balance between countries and exchange rate for currencies (Reilly, 1997).

In addition to monetary and fiscal policy actions, events such as war, political upheavals within or outside a country, or international monetary devaluation produces changes in the business environment that add to uncertainty of sales and earnings expectations and therefore the risk premium required by investors. Stock prices are based on the potential earning power of corporations. This factor is influenced directly by economic conditions. As a result, fluctuations in the general level of stock market performance reflect investor consensus concerning the economic outlook. Over a period of years, it is logical to expect a close relationship between business activity and changes in stock prices (Mendelson, 1976).

Availability of other investment alternative to the shares traded on the stock market affect the stock market performance. Stock markets compete for investment capital with other asset classes on the national stage. These include corporate bonds, government bonds, treasury bills, real estate and foreign equity among others. The relation between demand for Government bonds and treasury bills have been inversely proportional to equities and this relationship plays an important role in the capital market. For example, the interest rates have been down in Kenya, and that has resulted into the bull-run at the Nairobi Stock Exchange between 2004 and 2006 (www.nse.co.ke ).

Changes in Investor composition also affect stock market performance. As supply and demand for security change over time, different types of investors are attracted to the market. If the risk preferences of these new investors are not as those of current investors, the required rate of return tend to shift. Accordingly, price relationship will change quite independently of any modification in earnings expectations. For example,
the demographics of investors that have shaped the Nairobi Stock Exchanges relates to two dynamics; increased middle-aged investors who are peak earners with an increase in order investors tending to pull out of the market in order to meet the demands of retirement. The hypothesis is that the greater the proportion of middle-aged investors among the investing population in our capital market, the greater the demand for equities and the higher the valuation multiples like the price earnings ratio (Reilly, 1997).

Market sentiment also referred to as the psychology of market participants affect stock market performance. Market sentiment is often subjective, biased, and obstinate. The uncertain mass reaction of individuals to developments affecting the stock market is on of the factors that handicap stock markets forecasting. A mild market flurry caused by a spurt in business activity may generate a wave of buying enthusiasm that raises stock prices to boom levels. As an indication of this tendency, from January 1967 through December 1968 the American Stock Exchange Index more than doubled in the face of a business activity advance of about ten percent. The starry-eyed optimism of buyers who believe that prices are heading indefinitely higher may produce substantial advances that are not justified by underlying financial considerations. On the other hand, pervasive investor gloom, generated by economic or political uncertainties, could drive prices to levels that appear equally unjustified by standard financial tests, (Mendelson, 1976).

The occasionally irrational attitude of buyers was noted by John Maynard Keynes, who said that professional investors "are concerned, not with what an investment is really worth to a man who buys it 'for keeps,' but with what the market will value it at , under the influence of mass psychology, three months or a year hence." Psychological factors motivating individuals to buy and sell stocks are difficult to evaluate and make hazardous the role of stock market forecasters. They, however, present opportunities for substantial profits and therefore cannot be ignored by more adventuresome investor (Mendelson, 1976). This irrational attitude of buyers due to political related activities before or after an election could also affect the stock market performance.

### 2.5 Implications of General Elections on Performance of Stock Market

Despite the significant popular appeal of the notion that political forces affect the U.S. stock market, there has been little systematic research examining the question. The following paragraphs report the development of research examining political effects on stocks. Essentially three major hypotheses have been tested in terms of political effects on U.S. stock returns (Jones, 2002).

The first effect tests the popular wisdom that over time the stock market prefers Republican presidential administrations to Democratic administrations. This effect is referred to as the "party" effect. The second effect, related to the first in that the subject of interest is the president's political party, tests the market's immediate reaction to the election of a Democratic or Republican President. This event effect is called the "election reaction." Like the first two political effects, the third effect rests on popular wisdom. In this case, the wisdom holds that the last two years of a president's four-year term feature better stock performance than do the first two years and consequently the third effect of interest is the "second-half" effect (Jones, 2002)

The party effect, in which popular wisdom asserts that the stock market prefers Republican presidents to Democrat's turns out to be false. Indeed the evidence supports the opposite proposition in that stocks perform better under Democratic presidents than under Republicans. Huang (1985), for example, found that annual rates of return on stocks from 1929-1980 were better under Democratic presidents than under Republicans. Siegel (1998) found similar results over the 1888-1997 period. Johnson and Chittenden, (1999) reported no difference in returns of the Standard \& Poors 500 Index based on the party affiliation of the president during the 1929-1996 period. However, when the same authors used an index of small stocks the party effect was pronounced, with stocks performing better under Democratic presidents than under Republicans. The question of differential returns by political party has also been tested in England by Hudson, Keasey, and Dempsey (1998) who found no difference in the performance of the Financial Times 30 share Index between Tory and Labour governments.

The question of election reaction, where the authors examined the immediate market reaction to the presidential election have been carried out. Studies using various event methodologies have provided consistent evidence that the immediate market reaction to the election of a Republican president is positive while the election of a Democratic president creates a negative market reaction. Siegel (1998) found that from 1888 to 1996 the election of a Republican president produced a positive market reaction, as measured by the change in the Dow Jones Industrial Average, while the election of a Democrat produced a negative market reaction. Two other studies of broad equity markets found similar results during the periods from 1900-1976 (Riley and Luksetich, 1980) and 1900-1968 (Niederhoffer, Gibbs, and Bullock, 1970).

Further an event study that focused on defense-industry stocks found positive excess returns in those equities when Republican presidents were elected and negative excess returns when Democrats were elected (Homaifar, Randolph, Helms, and Haddad, 1988). In the near-term, the empirical evidence surrounding the election reaction effect is entirely consistent with popular wisdom. Like the other two effects, previous evidence supporting the second-half effect is quite consistent. Stovall (1992) studied the relationship between stock market performance and presidential cycles from 1901 to 1991. Specifically, 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. Siegel (1998) confirmed the second-half effect for the 1888-1997 period, and noted that the third year of any president's term produced that best stock returns of the four years. In their study of monthly prices of the Standard \& Poors 400 between 1948 and 1978, Allvine and Oneill (1980) also found that the last two years of the four-year term produced better stock returns than did the first two years. Similar results are reported by Huang (1985), for the 1929-1980 period, and by Johnson and Chittenden (1999), for the 1929-1996 period. Despite the empirical support for the popular wisdom that the last two years of the presidential cycle are better for stocks than are the first two years in the United States, the same effect apparently does not apply to England, where one study reported no difference in stock returns over the terms of the various British governments (Hudson et al., 1998).

### 2.6 The Kenya Stock Market

### 2.6.1 The Historical Perspective

In Kenya, dealing in shares and stocks started in the 1920 's when the country was still a British colony. There was however no formal market, no rules and no regulations to govern stock broking activities. Trading took place on gentlemen's agreement in which standard commissions were charged with clients being obligated to honour their contractual commitments of making good delivery and settling relevant costs. At that time, stock broking was a sideline business conducted by accountants, auctioneers, estate agents and lawyers who met to exchange prices over a cup of coffee. Because these firms were engaged in other areas of specialisation, the need for association did not arise (www.nse.co.ke ).

In 1951 an Estate Agent by the name of Francis Drummond established the first professional stock broking firm. He also approached the then finance minister of Kenya, Sir Ernest Vasey and impressed upon him the idea of setting up a stock exchange in East Africa. The two approached London Stock Exchange officials in July of 1953 and the London officials accepted to recognise the setting up of the Nairobi Stock Exchange as an overseas stock exchange (Muga, 1994).

The Nairobi Stock Exchange was constituted as a voluntary association of stockbrokers registered under the Societies Act in 1954. The business of dealing in shares was then confined to the resident European community, since Africans and Asians were not permitted to trade in securities until after the attainment of independence in 1963. At the dawn of independence, stock market activity slumped due to uncertainty about the future of independent Kenya. In the first three years of independence, marked by steady economic growth, confidence in the market was once again rekindled and the exchange handled a number of highly oversubscribed public issues (Muga, 1974).

The growth was however halted in 1972 when the oil crisis introduced inflationary pressures in the economy which depressed share prices. A $35 \%$ Capital Gains Tax was introduced in 1975 (suspended since 1985), inflicting further losses to the exchange which at the same time lost it's regional character following nationalizations, exchange controls and other inter-territorial restrictions introduced in neighbouring Tanzania and Uganda. For instance in 1976 Uganda compulsorily acquired a number of companies, which were either quoted or subsidiaries of companies quoted, on the Nairobi Stock Exchange (www.nse.co.ke).

### 2.6.2 The Kenyan Stock Market Structural Changes

In 1980 the Kenyan Government realized the need to design and implement policy reforms to foster sustainable economic development with an efficient and stable financial system. In particular, it set out to enhance the role of the private sector in the economy, reduce the demands of public enterprises on the exchequer, rationalise the operations of the public enterprise sector to broaden the base of ownership and enhance capital market development.

The International Finance Corporation and the Central Bank of Kenya carried out a study on, "Development of Money and Capital Markets in Kenya". The 1984 study became a blueprint for structural reforms in the financial markets which culminated in the formation of a regulatory body, 'The Capital Markets Authority' (CMA), in 1989, to assist in the creation of a conducive environment for the growth and development of the country's capital markets (IFC/CBK, 1984). In 1988 Kenya Commercial Bank become the first company to privatize through the Nairobi Stock Exchange after the Kenya Government successfully sold $20 \%$ of its holding in the Bank .

In 1991 NSE was registered under the Companies Act and phased out the "Call Over" trading system in favour of the floor based Open Outcry System. The NSE 20-Share Index recorded an all-record high of 5030 points on Feb. 18, 1994. The NSE was rated by the International Finance Corporation as the best performing market in the world with a
return of $179 \%$ in dollar terms. Extensive modernization exercise is undertaken, including a move to more spacious premises at the Nation Centre in July 1994, setting up a computerized delivery and settlement system (DASS) and a modern Information Centre. For the first time, the number of stockbrokers increase with the licensing of eight new brokers (www.nse.co.ke).

The Kenyan Government relaxed restrictions on foreign ownership in locally controlled companies subject to an aggregate limit of $20 \%$ and an individual $2.5 \%$ in 1995. These were doubled to $40 \%$ and $5 \%$ respectively in the June 1995 budget to help encourage foreign portfolio investments. The entire Exchange Control Act was repealed in December 1995. Seven more stockbrokers were licensed, bringing the number to twenty from the original six (one of which still survives) at it's inception in 1954. Commission rates were reduced considerably from $2.5 \%$ to between $2 \%$ and $1 \%$ on a sliding scale for equities and $0.05 \%$ for all fixed interest securities.

In 1996 the largest share issue in the then history of NSE, the privatization of Kenya Airways, came to the market and more than 110,000 shareholders acquired a stake in the airline. The Kenya Airways Privatisation team was awarded the World Bank Award for Excellence for 1996 for being a model success story in the divestiture of state-owned enterprises. In 1998 the government expanded the scope for foreign investment by introducing incentives for capital markets growth including the setting up of tax-free Venture Capital Funds, removal of Capital Gains Tax on insurance companies' investments, allowance of beneficial ownership by foreigners in local stockbrokers and fund managers and the envisaged licensing of Dealing Firms to improve market liquidity.

### 2.6.3 Recent Developments at NSE

Kenya Oil Company became the first listed company in NSE's history, to split its shares in 2004. The company split $15,000,000$ ordinary shares of Kshs. 5.00 each in the proportion of Ten shares for every one held. East Africa Breweries followed Kenol by splitting its shares in the proportion of five for every one held. Since then, many other listed companies have split their shares. NSE witnessed cross-border listing of Kenya Airways shares to Uganda and Tanzania Stock Exchanges and later, the East Africa Breweries listed in Uganda Securities Exchange (www.nse.co.ke ).

Kenya Electricity Generating Company (KenGen) Initial Public Offering (IPO) has been the Kenya's largest IPO to date. KenGen is Kenya's leading electrical power generating company producing approximately $80 \%$ of the electricity consumed in the country. The Government of Kenya sold a $30 \%$ stake ( $659,508,437$ shares) to the pubic in March 2006. The issue was oversubscribed by $333 \%$, with subscriptions received amounting to Kshs 26.0 billion (US\$ 354.71 million) or Kshs 18.2 billion (US\$ 248.3 million) about the target amount. KenGen was listed on the NSE on 17th April 2006. KenGen IPO created a lot of awareness on investing in stock among the Kenyan public and resulted into 250,000 additional investors through the NSE. Between 2005 and 2007 the NSE has listed the following new companies, KenGen, Equity Bank, ScanGroup, AccessKenya, Kenya Re and Eveready East Africa. All these were Initial Public Offers which were heavily oversubscribed (www.nse.co.ke ).

### 2.6.4 Automation of the Trading System

In November 2004 the Central Depository System of the NSE was introduced, automating settlement and achieving $\mathrm{T}+5$. The Automated Trading System (ATS) was sourced from Millennium Information Technologies (MIT) of Colombo, Sri Lanka, who were also the suppliers of the Central Depository System (CDS). The NSE trading hours increased from 2 to 3 hours ( $10: 00 \mathrm{am}-1: 00 \mathrm{pm}$ ). The benefits of the new system include: Greater transparency in the placement of bids and offers; improvement in market
surveillance and; Transmission in almost in real time, trading information relating to index movements and price and volume movements of traded securities. As such the Exchange views a situation where it will soon have an opportunity to enhance its revenue streams through information vending to its stakeholders.

### 2.6.5 Nairobi Stock Exchange Market Segments

In 2001, NSE was categorized into three market segments namely; the Main Investments Market Segment (MIMS), the Alternative Investments Market Segment (AIMS) and the Fixed Income Securities Market Segment (FISMS). Each market segments has a list of requirements which the issuers of securities are required to meet before the securities are issued and listed on the NSE (www.nse.co.ke).

The MIMS is the main quotation market which has a total fifty four listed companies. Companies listed under this segment are further categorized in four sectors that describe the nature of their business, namely: agricultural, industrial and allied, finance and investment and commercial and services. The AIMS which has eight companies listed provides an alternative method of raising capital to small, medium sized and young companies that find it difficult to meet the more stringent listing requirements of the MIMS. The FISMS, on the other hand, provides an independent market for fixed income securities such as treasury bonds, corporate bonds, preference shares and debenture stocks, as well as short-term financial instruments such as treasury bills and commercial papers (www.nse.co.ke)

### 2.7 Historical Perspective of General Elections in Kenya

As Kenya prepared for independence, two national parties were formed: Kenya African National Union (KANU) and the Kenya African Democratic Union (KADU). KANU was victorious in two pre-independence elections. Kenya achieved independence on $12^{\text {th }}$ December 1963 from the United Kingdom and a year later the Republic of Kenya was formed. (http://africanelections.tripod.com/ke ).

The first President of the Republic of Kenya died in office in 1978 and was constitutionally succeeded by the Vice-President. Kenya was declared a de jure one party state by the National Assembly in June 1982. In December 1991 the then ruling KANU held a special conference and agreed to introduce a multiparty system and new political parties were legally registered. The constitution was also changed to limit the presidential term of office to two five-year terms.

The sections that follow provide a summary of the events surrounding the last four multiparty elections held in Kenya in 1992, 1997, 2002 and 2007. This provides the background against which the performance of the Nairobi Stock Exchange will be evaluated before and after elections in those years.

## 1992 General Elections

A total of eight political parties contested the 1992 elections. The incumbent was reelected and KANU won a strong majority in Parliament (NEMU, 1992).

## 1997 General Elections

In 1997, there were fifteen Presidential candidates as compared to seven candidates in 1992 elections. The incumbent won a further term following the December 1997 election. KANU also won a narrow majority in the parliamentary election (http://africanelections.tripod.com/ke ).

## 2002 General Election

The 2002 was a transitional general election in Kenya. Having served two terms after 1992 and 1997 election the incumbent was constitutionally barred from any further term in office. Five candidates contested the December 27, 2002 Presidential elections. The National Rainbow Coalition candidate was elected president (Commonwealth, 2006).

## 2007 General Elections

The December 27, 2007 election was the most competitive in the country's history with a record nine presidential candidates. The voting process was largely peaceful and the vote tallying processes at the polling stations went on well. However, the process of tallying presidential results was marred with controversy and prolonged delay in announcement of the final results.

On December 30, 2007, the Electoral Commission of Kenya (ECK) announced the incumbent the winner and he was sworn in the same day for a second year term. ODM rejected the results and what followed was violence in various parts of the country protesting the outcome of the results (Commonwealth, 2008).

## CHAPTER THREE

### 3.0 RESEARCH METHODOLOGY

### 3.1 Research Design

This is an empirical study analyzing the stock market performance before and after the general elections. The period of study focused on NSE performance for the period between 1991 and 2008. This period covers the last four general elections conducted in Kenya after the re-introduced of multi-party politics in Kenya after many years of one party rule. This period was selected because during this general elections competitive Presidential, Parliamentary and Civic elections were held compared to previous general elections which did not include presidential elections. The NSE index performance during this period was analyzed and the performance of the NSE index during election years compared to none election years.

### 3.2 Data Collection

The study used secondary data from the NSE. Data was obtained from the NSE and covered the period between $31^{\text {st }}$ January 1991 and $30^{\text {th }}$ September 2008. The date of each general election held in Kenya in the years 1992, 1997, 2002 and 2007 was the event date. The event dates were $29^{\text {th }}$ December 1992, $29^{\text {th }}$ December 1997, $27^{\text {th }}$ December 2002 and December $27^{\text {th }} 2007$. The study focused on NSE performance as measured using the NSE 20 share index on a monthly basis for the study period.

### 3.3 Data Analysis

The main data variable for this study is the NSE index. The NSE Index is used to measure the performance of the NSE from each trading day. An increase in the NSE indicates that the NSE performance is on an upward trend with share prices of most shares increasing.

NSE performance indicators, principally the NSE 20 Share Index and its derivatives (measures of volatility) were analyzed to capture trends of performance of the market for the study period. The percentage increase or decrease in the NSE index before and after elections were calculated and a comparison done from one election period to another. The pooled-variance $t$-test for differences in means was used to compare significance of differences for the comparative study periods.

Stock market index movement is used to judge the performance of the stock market and an indication of the economic activities in the country. When the stock market index moves upwards on a continuous basis the market is referred to as bullish and when the index moves downwards the market is referred to as bearish. At time the markets moves within a very narrow range and it is neither bullish nor bearish. The stock market index movement before and after the general election was tracked to determine the movement. This was used to determine the performance of the Nairobi Stock Exchange before and after each election. Line graphs were also used to analyze the trend of the NSE index before and after general elections. Tests of significance was undertaken to determine whether there were any significant differences in performance before and after elections.

## CHAPTER FOUR

### 4.0 DATA ANALYSIS AND RESULTS

### 4.1 Introduction

This section presents results of the performance of the NSE 20 share index for the periods before and after the general elections of 1992, 1997, 2002 and 2007. The results have been obtained from an analysis of NSE index at the end of each month during the study period. Analysis was mainly centered on obtaining statistics for the pooled-variance ttests for differences in means of the period before and after the general election, that is, differences in two means. Significance tests were used to determine selection of the appropriate hypothesis. Further analysis utilizes trends of the movement of the performance of the market to describe its patterns. Correlation analysis has also been utilized to understand the relationship between the period in question and the performance of the market at that particular time. .

The data sets are analyzed by means of the pooled-variance $t$ test for differences in two means. The two means represents periods before and after the General Elections. This analytical procedure uses the sample means and sample standard deviations for calculating the differences between means of two samples which are assumed to be independent. The procedure works on the assumption that samples are randomly and independently drawn from normally distributed populations. It also assumes that the population variances are equal.

### 4.2 Hypothesis Tests

The tests are as follows:

Null hypothesis: There is no difference in the performance of the stock market for the period before and after a General Election.

Alternative hypothesis: There is a difference in the performance of the stock market for the period before and after a General Election.

This is stated as follows:
$H_{o} \cdot \mu_{I}=\mu_{2}$
$H_{l}: \mu_{I} \neq \mu_{2}$
Where $\mu_{1}=$ mean of population 1
$\mu_{2}=$ mean of population 2

### 4.3 Statistical Analysis

4.3.1 Statistics for the $1991 / 1992$ period

| Year | Mean NSE <br> Index | Variance | Pooled <br> Variance | P value |
| :--- | ---: | ---: | ---: | ---: |
| 1991 | 942.47 | 308.34 |  | $2.18385 \mathrm{E}-07$ |
| 1992 |  |  | $4,387.07$ |  |
|  | $1,142.08$ | $8,465.80$ |  |  |

Table 1: Statistics for the 1991/1992 data

The mean index for the year 1991 which was a pre-election year is less than that of the election year, 1992. From the table, the $p$-value is less than the critical value of 0.05 (at the $95 \%$ significance level). This means that the null hypothesis can be rejected on the basis of available data. Accordingly, it is concluded that there was significant variation in the performance of the stock market in the year of the election, that is, 1992, compared to the year preceding the election.

The market was relatively less volatile in 1991 compared to 1992 ( $1.86 \%$ compared to $8.06 \%$ ). Accordingly, it can be concluded that the market exhibited significantly more volatility in the election year compared to the preceding year.

### 4.3.2 Statistics for the $1996 / 1997$ period

Table 2 compares the performance of the market for the 1996/1997 period. The mean performance of the market, as measured by the index, for the two years was somewhat similar. The volatility for each of the period under consideration was also approximately the same (1996 relative dispersion was $3.55 \%$ and for $19974.55 \%$ ). This implies that the market was generally stable in the two periods and the risk-return profile of the stocks was just about the same for the two periods. The table shows that the $p$-value for test of significance of differences between the two periods is 0.00014 which is less than the critical 0.05 value for the $95 \%$ significance level. Accordingly, the null hypothesis is rejected and it is concluded that there is a significant difference in the performance of the market in the two years, as shown in Table 2 on the next page.

| Year | Mean NSE <br> Index | Variance | Pooled <br> Variance | P value |
| :--- | ---: | ---: | ---: | ---: |
| 1996 | $3,116.81$ | $12,244.19$ | $17,563.75$ | 0.0001441 |
| 1997 | $3,364.94$ | $22,883.3$ |  |  |

## Table 2: Statistics for 1996/1997 period

### 4.3.3 Statistics for the $2001 / 2002$ period

The next table shows summary statistics for the 2001/2002 period. The data shows that mean performance for 2001 (pre election year) was slightly higher than for the election year (2002). The dispersion of the stocks was, however, approximately the same, with relative dispersion for 2001 being $12.24 \%$ while that of 2002 was $9.91 \%$. This means that general market volatility was more or less constant for the two year periods. The $p$-value for the pooled-variance test is less than 0.05 at the $95 \%$ significance level. Thus, available data reveals a significant difference in the performance of the stocks for the two years. This is shown in the next table:

| Year | Mean <br> Index | NSE | Variance | Pooled <br> Variance | P value |
| :--- | ---: | ---: | ---: | :--- | :--- |
| 2001 | $1,624.82$ | $39,564.40$ | $26,419.98$ | $5.44371 \mathrm{E}-07$ |  |
| 2002 | $1,162.70$ | $13,275.57$ |  |  |  |

Table 3: Statistics for 2001/2002 period

### 4.3.4 Statistics for the 2006/2007 Period

The next table shows the summary statistics for the $2006 / 2007$ period. From the table, the mean index for the pre election year (2006) was lower than for the election year. Volatility of the market, as measured by relative dispersion shows that variation in stock performance was higher in 2006 compared to 2007 ( $13.24 \%$ compared to $5.02 \%$ respectively).

The $p$-value statistic shows that results are significant for the difference in the mean performance for the two years. Accordingly, the null hypothesis is rejected and it is concluded that the performance of the stock market is significantly different in the two years. The respective scores are shown in table 4 below:

| Year | Mean NSE <br> Index | Variance | Pooled <br> Variance | P value |
| :--- | ---: | ---: | ---: | ---: |
| 2006 | $4,597.1$ | $370,669.58$ | $220,597.96$ | 0.001528 |
| 2007 |  |  |  |  |

Table 4: Statistics for 2006/2007 period

### 4.4 Control Years

The next section discusses the performance of the stock market of the control years. The objective is to determine whether difference in performance was limited only to the election event or whether it was widespread throughout the period of study. Five sets of non-election years were selected for this purpose. The years, with their respective scores
for the means, variances, pooled variances, and p-values and related explanations are discussed next.

### 4.4.1 Market Performance for 1993/1994 control period

In the first set (for 1993/1994 period), there is a high difference in the relative dispersion for the two years ( $24.52 \%$ for 1993 and $11.80 \%$ for 1994). This means that volatility of stocks was higher in 1993 than for 1994. The mean index also differs significantly for the two years with value for 1994 being higher than for 1993.

The value for the $p$-statistic indicates a significant difference in the performance of the stock market for the two years. Accordingly, the null hypothesis is rejected and it is concluded that market performance was significantly different for the two years. These statistics are shown in the next table:

| Year | Mean NSE <br> Index | Variance | Pooled <br> Variance | P value |
| :--- | ---: | ---: | ---: | ---: |
| 1993 | $1,628.05$ | $159,414.67$ | $190,518.55$ | $5.77607 \mathrm{E}-12$ |
| 1994 | $3,989.53$ | $221,622.43$ |  |  |

Table 5: Statistics for 1993/1994 control years

### 4.4.2 Market Performance for 1995/1996 control period

The next table shows the market performance for the 1995/1996 control period. From the table, it is seen that the mean index was about the same for the two year periods though variance was different. The measure of relative dispersion shows that volatility in 1995
was higher ( $8.85 \%$ ) compared to $1996(3.55 \%)$. The $p$-value statistic shows that there is a significant difference in the mean performance of the market in the two years.

| Year | Mean NSE <br> Index | Variance | Pooled <br> Variance | P value |
| :--- | ---: | ---: | ---: | ---: |
| 1995 | $3,446.92$ | $93,037.06$ | $220,597.96$ | 0.001909743 |
| 1996 | $3,116.8125$ | $12,244.19493$ |  |  |

Table 6: Statistics for 1995/1996 control years

### 4.4.3 Market Performance for 1999/2000 control period

The next table shows the test statistics for market performance for the 1999/2000 control period. From the table, though the relative volatility was not greatly different ( $9.80 \%$ and $6.66 \%$ for 1999 and 2000 respectively), the $p$-value statistic reveals that there was a significant difference in the performance of the market for the two years.

| Year | Mean NSE <br> Index | Variance | Pooled <br> Variance | p value |
| :--- | ---: | ---: | ---: | ---: |
| 1999 | $2,637.09$ | $66,766.32$ | $42,892.14$ | $9.72931 \mathrm{E}-07$ |
| 2000 | $2,070.30$ | $19,017.96$ |  |  |

Table 7: Statistics for the 1999/2000 control years

### 4.4.4 Market Performance for $2003 / 2004$ control period

The market exhibited a higher volatility in 2003 (with relative dispersion of 20.49\%) compared to 2004 (relative dispersion of $6.55 \%$ ). This implies that volatility was almost three times higher in 2003 compared to 2004. The test of significance also shows that average market performance for the two years was significantly different. The respective summary statistics are shown in table 8 below:

| Year | Mean NSE <br> Index | Variance | Pooled <br> Variance | P value |
| :--- | ---: | ---: | ---: | ---: |
| 2003 | $2,079.76$ | $181,597.54$ | $107,948.58$ | $1.34333 \mathrm{E}-05$ |
| 2004 | $2,826.79$ | $34,299.63$ |  |  |

Table 8: Statistics for the 2003/2004 control period

### 4.4.5 Market Performance for 2005/2006 control period

The relative variation in the market was almost the same for the two years ( $10.16 \%$ and $13.24 \%$ for 2005 and 2006 respectively). The test of significance, however, reveals that average market performance for the two years was significantly different. This is shown in Table 9 below:

| Year | Mean NSE <br> Index | Variance | Pooled <br> Variance | P value |
| :--- | ---: | ---: | ---: | ---: |
| 2005 | $3,655.08$ | $137,969.98$ | $254,319.70$ | 0.000147895 |
| 2006 | $4,597.1$ | $370,669.58$ |  |  |

Table 9: Statistics for the 2005/2006 control period

### 4.4.6 Discussion of the Results of Control Periods

The results of the various sets of control periods indicate a consistent pattern of significant differences in the performance of the market for each of the periods under comparison. This therefore means that the market's performance was significantly different from year to year and was not necessarily dependent on the election event.

### 4.5 NSE Performance

This section analyses the market performance from the short and medium term perspective (three months to 36 months) for different periods before and after general elections.

### 4.5.1 Market performance in the Short Term Period before and after Elections

Analysis of data relating to the performance of the market for the three-month period preceding the 1992 elections reveals that the market index declined by $5 \%$ but recovered to increase by $7 \%$ for the three-month period after the election, that is, by the end of March 1993. This is shown in Chart 1 below:


Chart 1: Market performance for three month period before and after elections
In the election year of 1997 , the market index decreased by $10 \%$ for the three-month period preceding the election date (held in December 1997) but again recovered slightly to record a 3\% increase by end of three months after the elections as shown in Chart 2:


Chart 2: Market performance for three month period before and after elections

The pattern is different during the 2002 elections than was the case in 1992 and 1997. Three months before the 2002 election, the NSE index registered an increase of $31 \%$ followed by a further increase of $18 \%$ three months after the elections, as shown in Chart 3 next


Chart 3: Market performance for three month period before and after elections
The rise in the market performance in the first three months of 2003 followed the smooth transition of the political regime from the Kenya African National Union (KANU) regime to a new Government Coalition.

There was a reversal in the pattern of increase before and after the election date for the 2007 election which saw the NSE index increase by $6 \%$ three months before the 2007 election but decrease by $11 \%$ three months after the general election. This decline may be attributed to the events surrounding the 2007 disputed Presidential election manifested
in country-wide violence for most of that three month period. This is shown in Chart 4 next:


Chart 4: Market performance for three month period before and after elections

The above suggests that events before and after the general elections may have an impact on the performance of the market as measured by the NSE index. When there is calm in the political front and the transition is smooth, the market might respond by recording an increase in the NSE index.

### 4.5.2 Market Performance during Pre Election, Election, and Post Election Periods

The market registered an increased of $4 \%$ in 1991 which was the year before the 1992 elections. During the 1992 election year, the NSE registered an increase of $22 \%$ performing better than the year before and eventually rising to $115 \%$ in 1993. In the 1996 to 1998 period, the NSE registered a decline of $10 \%$ but did not increase or decline during the election year of 1997. There was, however, a decline of $5 \%$ in 1998. This means that the market performed better during the election year compared to the pre election year and performance declined after the election year.

In the 2001 to 2003 period, the NSE index declined by $29 \%$ in 2001 (year before the election) and registered an increase of $1 \%$ during the 2002 election year. The market registered a significant $101 \%$ increase in 2003. This election ushered in a new political regime (NARC) with new economic policies. The positive market performance can therefore be attributed to increased optimism in the economy and confidence in the economic policies of the new government. In the 2006 to 2008 period, the NSE index registered a $42 \%$ increase in 2006, which was the year before the election. However, the index declined by $4 \%$ in 2007 from the 2006 level.

This decline continued after the election year and by September 2008 the market index had declined by $23 \%$. This decline can be attributed to the disputed presidential election, post election violence and high inflation. This situation was compounded by global economic instability.

During the four elections held between 1991 and 2008, the NSE performed better in the election year compared to the year before, viz. $22 \%$ in 1992 versus $4 \%$ in $1991,0 \%$ in 1997 versus $-10 \%$ in 1996 and $1 \%$ in 2002 versus $-29 \%$ in 2001. In 2007 the NSE index registered a $4 \%$ decline compared to a $42 \%$ increase in 2006 . This suggests that events during election year and the expectations thereafter may have an impact on the performance of the NSE.

### 4.5.3 Market Performance In-between Election Years

The NSE index registered a large increase of $291 \%$ during the period 1993 to 1994 after the 1992 election. The index however lost its gains in the following period of 1995 to 1996, declining by $32 \%$. The NSE index recorded a decline of $26 \%$ in the 1998 to 2001 period. This slide continued during the period 2000 to 2001 with the index declining by $41 \%$. The period 2003 to 2004 saw a recovery in the market where the NSE index registered a $116 \%$ followed by a further increase of $92 \%$ during the period 2005 to 2006 . Thus, the market performed better in the first two years after the elections compared to the next two years during the three periods after the 1992, 1997 and 2002 elections.

### 4.6 NSE Index Trend Analysis

### 4.6.1 NSE Index trend over the study period

Chart 5 below shows the trend of the NSE index over the study period. According to the trend curve, the market had the highest performance in 1994 and 2007. During these
years, the index averaged approximately 4000 and 5200 points respectively. Performance was lowest in 1991 and 2002 with the index score averaging approximately 950 and 1100 points respectively.

The index for the election years of $1992,1997,2002$, and 2007 is approximately: 1100 , 3300,1100 , and 5200 , respectively. This indicates that market performance was lowest in the election year of 1992 and 2002 but was highest in the election year of 2007.

From the chart, it is clear that performance began dropping immediately after the election year of 1997 and continued that way until it was lowest in the election year of 2002. Thereafter, the market continued to improve until it peaked in the year 2007. The recovery period of 2002 to 2007 corresponds to the period under a new political dispensation which put in place new economic policies.


Chart 5: Market performance over study period showing trend movements

### 4.6.2 Performance of the Market in terms of Volatility

The market exhibited significant variation over the study period. Chart 6 shows that dispersion was highest in the year 1994 and 2006. It was lowest in 1991 and 1996. This shows that volatility is lowest in the years just before the elections as was the case for 1991 (which preceded the general election of 1992) and 1996 (which preceded the general election of 1997). Variation was also low in 2001 which preceded the general election of year 2002, which had a very low variation.


Chart 6: Trend movements in the market volatility over study period

### 4.6.3 Percentage Change in Mean Index over the Study Period

Chart 7 shows the percentage change in the mean index over the study period. The chart shows that there was a significant change in market performance in 1994 relative to 1993. Similarly, there was a significant change in performance in the year 1995 relative to 1994. There was a further significant change in the year 2003 relative to 2002 and 2004 relative to 2003.

The chart reveals that there was relatively small change in the election years of 1992, 1997, 2002 and 2007 relative to their immediate previous years.


Chart 7: Trend movement of percentage change in market

### 4.6.4 Relative Market Volatility for Study Period

The market exhibited the highest variation in the period just after the election of 1992 with the greatest volatility occurring in 1993. Thereafter, there was a decline in steep decline in volatility (market tending towards stability) reaching its lowest in the year 1996, which was the year just before the election of 1997. Immediately after the election, the market volatility began rising though less steeply. The market realized steep volatility from the election year of 2002 to 2003 . Thereafter, there was a drop in volatility reaching a low of about $7.0 \%$ in 2004.

There was a further rise in volatility which was highest in 2006 and dropped in the election year of 2007. This information is shown in chart 8 next:


Chart 8: Trend movement of the relative market volatility

### 4.7 Correlation Analysis for Study Period

The test of correlation between the year under consideration and volatility of the market shows that there was little association between these two variables. The correlation coefficient between the year of study and relative variation is a weak 0.062 . The results are also not significant for the test of significance that volatility depends on the year being studied. The p -value is 0.813 which is greater than the 0.05 critical value for the $95 \%$ significance level. Accordingly, it is concluded that there is no sufficient reason to hold that market volatility is dependent on the year under consideration. This is shown in the table below:

Correlations

|  |  | Relative <br> variation |  |
| :--- | :--- | ---: | ---: |
| Year | Pearson Correlation | 1 | .062 |
|  | Sig. (2-tailed) | . | .813 |
|  | N | 17 | 17 |
| Relative variation | Pearson Correlation | .062 | 1 |
|  | Sig. (2-tailed) | .813 |  |
|  | N | 17 | 17 |

Table 10: Correlation analysis between year of occurrence and market relative volatility

There is also a low correlation between the year being studied and the variance (absolute) of the market. The correlation coefficient is equal to 0.300 which shows a weak correlation between the two variables. The results are also not significant as the p-value is equal to 0.243 which is greater than the critical value of 0.05 for the $95 \%$ significance level. Accordingly, it is concluded that available evidence does not support a correlation between the year being studied and the volatility of the market. This is shown in the next table:

## Correlations

|  |  | Year | NSE index <br> variance |
| :--- | :--- | ---: | ---: |
| Year | Pearson Correlation | 1 | .300 |
|  | Sig. (2-tailed) | . | .243 |
|  | N | 17 | 17 |
| NSE index variance | Pearson Correlation | .300 | 1 |
|  | Sig. (2-tailed) | .243 |  |
|  | N | 17 | 17 |

Table 11: Correlation analysis between year of occurrence and market volatility

Thus, there does not seem to be any significant relationship between the point in time the market is observed and the degree of volatility.

## CHAPTER FIVE

### 5.0 CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Summary of Findings and Conclusions

The study shows that there is a significant difference in the performance of the market for the years before and after the general elections. However, a comparison of the control years also shows that there is a significant difference in the performance of the market one year to the next. Accordingly, it is hard to conclude that the general election is the event that causes the difference in market performance.

The performance of the market appears to be strongly linked to the political regime prevailing. The market performance appears linked to the political events and the regime in power. From this study, performance of the market declined steadily from 1997 to 2002 during the last five years of the KANU regime. The market improved steadily after the political transition from KANU to a new Coalition Government in 2003 and peaked in 2007 when the country went into another general election.

Volatility of the market appears to be lowest in the years just before a general election and also in the election years themselves. This suggests that the stock market is not very vibrant as investors wait to see the direction the country will take after the elections. Correlation is low between the year of study and market performance. Accordingly, it
can be concluded that market performance is not strongly related to the year in question, much less the election event.

### 5.2 Recommendations

The election year should not have a major impact on investment decisions. The study shows that the market performed better during the election year than the year before the election in 1992, 1997 and 2002. The performance was also noticeably better in the first two years after the election compared to the two years just before the next election. Investors should focus on their investment strategies and should not allow the election events to distort their decisions.

### 5.3 Limitations of the Study

- The period under study was limited to about 16 years, covering four general elections. Better results would be possible where the study period is longer, with a stock market that has been in existence for long time and a track record of competitive elections.
- NSE daily data not available over the study period hence month end data used for the study
- Limited information available on emerging markets performance before and after elections


### 5.4 Suggestions for Further Study

- Investigation of other factors (such as political, global factors (global economic impact on local market)) that influence stock market performance should be researched on.
- A study on the level of and participation of foreign investors in the stock exchange around the election period. If foreign investors consider that the political risk would be unacceptably high, they might prefer to exit the market causing a drop in the overall performance.

| NSE 20 SHARE INDEX 1991-2008, at end of each month  <br> 19   |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1995 | 1996 | 1997 | 1998 | 1999 |
| Month/Year | 1991 | 1992 | 1.176 | 3,819 | 3,940 | 3,409 | 3,477 | 3,348 | 2,983 |
| January | 914 |  | 1,176 | 5,031 | 3,897 | 3,230 | 3,474 | 3,362 | 2,989 |
| February | 942 | 1, |  |  |  | 3,042 | 3,355 | 3,213 | 2,815 |
| March | 924 | 1,048 | 1,252 | 4,378 |  | 3,019 | 3,289 | 3,015 | 2,768 |
| April | 970 | 1,056 | 1,342 | 3,559 | 3,519 |  |  | 3,016 | 2,760 |
| May | 949 | 1,082 | 1,398 | 3,620 | 3,415 |  |  |  | 2756 |
| June | 949 | 1,145 | 1,508 | 4,137 | 3,464 | 3,1 |  |  |  |
| July | 924 | 1,209 | 1,650 | 4,070 | 3,326 | 3,150 | 3,467 | 853 | 2,745 |
|  | 22 | 1,23 | 1,724 | 3,916 | 3,115 | 3,074 | 3,403 | 2,863 | 2,494 |
| August | 22 | 1,23 |  |  | 2,84 | 3,090 | 3,447 | 2,810 | 2,428 |
| September | 949 | 1,228 | 1,811 | 3,715 | 2,84 |  |  | 2,73 | 2,309 |
| October | 955 | 1,234 | 1,844 | 3,586 | 3,237 | 3,05 | 3,315 |  |  |
| November | 954 | 1,257 | 2,096 | 3,485 | 3,496 | 3,042 | 3,047 | 2,584 | 2,294 |
| November |  |  |  |  | 3,469 | 3,114 | 3,115 | 2,962 | 2,303 |
| December | 958 | 1,167 | 2,514 | 4,559 | 3,469 |  |  |  |  |
|  |  |  |  |  |  |  | 40,379 | 35,668 | 31,645 |
| Total | 11,310 | 13,705 | 19,537 | 47,874 | 41,363 | 37,402 | 3,365 | 2,972 | 2,637 |
| Average | 942 | 1,142 | 1,628 | 3,990 | 3,4 | 3,117 | 3,365 |  |  |
|  |  |  |  |  |  | -355 | 1 | -153 | -659 |
| Annual Increase/(Decrease) | 40 | 209 | 1,346 | 2,046 | $-1,091$ $-24 \%$ | -10\% | 0\% | -5\% | -22\% |
| \%age | 4\% | 22\% | 115\% | 81\% | -24\% | -10\% |  |  |  |
|  |  |  |  |  |  |  | -332 | 98 |  |
| 3 months before/after election |  | -61 | 85 |  |  |  |  | 3\% |  |
| \%age |  | -5\% | 7\% |  |  |  | -10\% |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 2 years after \& before elections |  |  |  | 3,392 |  | -1,445 |  |  | -812 |
| \%age |  |  |  | 291\% |  | -32\% |  |  | -26\% |
|  |  |  |  |  |  |  |  |  |  |

NSE 20 SHARE INDEX 1991-2008, at end of each month

| Month/Year | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January | 2,301 | 1,897 | 1,343 | 1,511 | 3,158 | 3,094 | 4,172 | 5,774 | 4,713 |
| February | 2,278 | 1,933 | 1,314 | 1,558 | 3,175 | 3,213 | 4,057 | 5,774 | 5,072 |
| March | 2,233 | 1,831 | 1,183 | 1,608 | 2,771 | 3,209 | 4,102 | 5,134 | 4,843 |
| April | 2,162 | 1,768 | 1,129 | 1,847 | 2,708 | 3,228 | 4,025 | 5,148 | 5,336 |
| May | 2,053 | 1,636 | 1,071 | 2,075 | 2,689 | 3,505 | 4,350 | 5,002 | 5,176 |
| June | 2,003 | 1,657 | 1,087 | 1,935 | 2,640 | 3,972 | 4,260 | 5,147 | 5,186 |
| July | 1,967 | 1,621 | 1,098 | 2,005 | 2,708 | 3,982 | 4,259 | 5,340 | 4,931 |
| August | 1,959 | 1,506 | 1,043 | 2,107 | 2,709 | 3,939 | 4,486 | 5,372 | 4,649 |
| September | 2,001 | 1,401 | 1,043 | 2,380 | 2,671 | 3,833 | 4,880 | 5,146 | 4,180 |
| October | 2,043 | 1,473 | 1,116 | 2,457 | 2,830 | 3,939 | 5,314 | 4,971 |  |
| November | 1,930 | 1,420 | 1,162 | 2,737 | 2,918 | 3,974 | 5,615 | 5,235 |  |
| December | 1,913 | 1,355 | 1,363 | 2,738 | 2,946 | 3,973 | 5,646 | 5,445 |  |
|  |  |  |  |  |  |  |  |  |  |
| Total | 24,844 | 19,498 | 13,952 | 24,957 | 33,921 | 43,861 | 55,165 | 63,487 | 44,086 |
| Average | 2,070 | 1,625 | 1,163 | 2,080 | 2,827 | 3,655 | 4,597 | 5,291 | 4,898 |
|  |  |  |  |  |  |  |  |  |  |
| Annual Increase/(Decrease) | -390 | -558 | 8 | 1,375 | 208 | 1,027 | 1,673 | -201 | -1,264 |
| \%age | -17\% | -29\% | 1\% | 101\% | 8\% | 35\% | 42\% | -4\% | -23\% |
|  |  |  |  |  |  |  |  |  |  |
| 3 months before/after election |  |  | 319 | 245 |  |  |  | 298 | -602 |
| \%age |  |  | 31\% | 18\% |  |  |  | 6\% | -11\% |
|  |  |  |  |  |  |  |  |  |  |
| 2 years after \& before elections |  | -948 |  |  | 1,583 |  | 2,700 |  |  |
| \%age |  | -41\% |  |  | 116\% |  | 92\% |  |  |

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