

**THE RELATIONSHIP BETWEEN SECURITIES MARKETS
DEVELOPMENT AND ECONOMIC GROWTH IN KENYA**

BY

JONATHAN LEYIAN NAMPASO

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF
BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS,
UNIVERSITY OF NAIROBI**

DECEMBER, 2017

DECLARATION

I declare that this project is my original work and has never been submitted to any other University for assessment or award of a degree.

Signature.....

Date.....

JONATHAN LEYIAN NAMPASO

D61/67249/2013

This research project has been submitted with my approval as the university supervisor.

Signed:

Date:

PROFFESOR JOSIAH ADUDA

LECTURER

UNIVERSITY OF NAIROBI

DEDICATION

I dedicate this paper to the Almighty God, my family, siblings and friends for the love, inspiration and support that have been constant pillars in my life.

ACKNOWLEDGEMENT

I would like to thank my family for being very supportive throughout my study time. Sometimes I had to be away from them for weeks and they stood behind me to see this is accomplished.

I acknowledge and immeasurably thank my Supervisor Prof. Josiah Aduda for tirelessly guiding me throughout the project and for the helpful insights provided over the project

I would like to appreciate my cousin Ibrahim Takih who has greatly contributed to this and by providing moral support. I would want to thank my colleague Mary sopia who has been of great assistance for proof reading and assisting in editing the document before presenting to the Professor.

Finally I would like to thank the University of Nairobi for the valuable professional skills that I have gotten from the institution which I shall use for the rest of my career and life.

TABLE OF CONTENT

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT	v
LIST OF TABLES	vii
ABBREVIATIONS	viii
ABSTRACT	ix
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study.....	1
1.1.1 Securities Market Development	3
1.1.2 Economic Growth.....	4
1.1.3 The Link between Securities Market Performance and Economic Growth.....	5
1.1.4 The Nairobi Securities Exchange	7
1.2 Research Problem	9
1.3 Objective of the study	10
1.4 Value of the study.....	11
CHAPTER TWO	12
LITERATURE REVIEW	12
2.1 Introduction	12
2.2 Theoretical Framework.....	12
2.2.1 The Solow Growth Model.....	12
2.2.2 Q-Theory	13
2.2.3 Life Cycle Theory.....	14
2.3 Empirical Literature Review	15
2.4 Conceptual Framework.....	19

2.5 Summary of Literature Review	20
CHAPTER THREE.....	24
RESEARCH METHODOLOGY.....	24
3.1 Introduction	24
3.2 Research Design	24
3.3 Population	25
3.4 Data Collection.....	25
3.5 Data Analysis	25
3.6 Data Reliability and Validity.....	26
CHAPTER FOUR	27
DATA ANALYSIS, RESULTS AND DISCUSSION	27
4.1 Introduction	27
4.2 Inferential Statistics	27
4.2.1 Correlation Analysis	27
4.2.2 Regression Analysis.....	29
4.4 Summary and Interpretation of Findings	32
CHAPTER FIVE.....	34
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	34
5.1 Summary	34
5.2 Conclusions	35
5.3 Recommendations.....	36
5.5 Limitations of the Study.....	37
5.6 Recommendations for Further Research.....	37
REFERENCES.....	39
APPENDIX: DATA COLLECTION FORM	42

LIST OF TABLES

Table 4.1: Correlation Analysis	28
Table 4.2: Model Summary	29
Table 4.3: ANOVA	30
Table 4.4: Coefficient of Results.....	31

ABBREVIATIONS

ATS:	-	Automated Trading System
CMA:	-	SECURITIES Market Authorities
GDP:	-	Gross Domestic Product
GNP:	-	Gross National Product
IPO:	-	Initial Public Offering
KBS:	-	Kenya Bureau of Statistics
MOU:	-	Memorandum of Understanding
NNP:	-	Net National Product
NSE:	-	Nairobi Securities Exchange
SPSS:	-	Statistical Package for social scientist
VAR:	-	Vector Autoregressive Model

ABSTRACT

This study sought to find out linkage between Securities markets development and economic growth in Kenya. The following factors determine the Securities market development: Market capitalization, regulations, trade and liquidity. This research took a cause and effect approach to establish the association between the Securities market performance and monetary performance in Kenya for the last eleven years. The quantitative research method was employed to define the nature of the relationship between the variables. The population of the study was Nairobi stock Exchange and to fulfill the purpose of the study data was collected from the Nairobi stock exchange. The study employed the Regression analysis model as well as the ANOVA test for causality to estimate as well as provide evidence regarding the nature and direction of relationship of the variables. The results depict a positive correlation between foreign direct investment, Market Capitalization, foreign trade and Securities turn over. Except for Securities traded value the rest of the variables can act as good predictors of Economic growth. With the above results, the policy makers should gear their efforts towards encouraging more people to participate in the securities Markets. Recently, Kenya treasury had made a good start through allowing people to buy bonds by mobile phone Applications but more incentives are required to enhance it and grow it further. Further studies are recommended on whether the derivatives can bring about a turnaround in the capital market operations, creating opportunities to the participants to realize optimal reward from their investments and to manage the associated risk effectively.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The role played by the Securities market in the national economies cannot be underscored. Securities markets offer investment opportunities, speculation, hedging, securities trading, and arbitrage opportunities. This study adopted a cause and effect approach to establish the correlation between the Securities market performance and economic growth in Kenya for the last eleven years. In this regard, therefore, quantitative research methods were employed to determine the nature of correlation between the variables. This period was suitable because it takes into consideration the most recent developments and policy impacts of the Capital market authority (CMA) on the Securities. A case in point, the NSE automation trading in 2006 integrated the Nairobi Securities Exchange with international markets in a bid to boost Securities market development.

The cause and effect approach enabled the researcher to understand how the dependent variable is influenced by the independent variable. Cooper and Schindler (2006) points out that the use of cause effect simplifies the explanations and relationship of variables under research.

Additionally securities markets are instruments of information dissemination and price discovery while raising capital for firms. Governments have largely used Securities markets to execute privatization which have considerably contributed to the development of emerging economies (Levine, 1991).

The association between Securities performance and economic growth is very important. Development of Securities markets enhance more economic activity, and they realize this by providing liquidity to companies, which utilize these resources to invest in new projects to expand, and, as consequence, generate more economic activity thus leading to economic growth (Paudel, 2005).

Considering that Securities markets in developed countries have been key contributors for economy, it would be probable to support the idea that financial development fosters economy growth or vice versa. A number of studies have demonstrated that an established Securities market can further economic growth in the long haul; however, it does not necessarily imply that Securities market development is always exogenous to economic growth. Schumpeter (1912) contend that in a properly functioning financial related framework, banks assist by encouraging monetary development through promotion of technological advancement through identification and funding of potential investors with the finest opportunity of successfully establishing innovative products as well as production process. In agreement to this observation, Bagehot (1873) and Hicks (1969) found out that as a result of development of a well working financial system in England, it triggered industrialization in that nation through an increase of access of funds by individual which is used to finance and implement capital ventures.

Some scholars are of different opinion on the conclusions arrived by Bagehot, Schumpeter and Hicks. They contend that fundamentally the financial sector development does not influence changes in economic growth. A case in point, Shliefer and Summers (1988) hinted that Securities market performance may trigger decreases in economic growth through promotion of counter-productive corporate takeovers. Additionally, Singh (1997) pointed out that Securities market might not be

vital in causing increases in GDP. Due to the differing opinions from the different scholars, this study tries to establish whether there is a link between Securities development and economic growth.

1.1.1 Securities Market Development

A securities market can simply be defined as a place where securities are issued and traded. Additionally it is where new shares are issued for the first time i.e. Initial Public Offers (IPO). The transactions in this market are overseen and regulated by securities exchange markets. In Kenya the organizer is the Nairobi Securities Exchange (NSE) who is further regulated by the Capital market Authorities (CMA).

Simiyu (1992) underscores the importance of deriving an objective measurement basis for the performance of the Securities exchange. Even though there has been no single conclusion on the measurement basis that should be used, most researchers concur that the use of Securities market index is plausible given that it helps to assess the performance of the market over a period of time. He proposes the use of a weighted Securities market index which reflects the market Capitalization of Securities.

Securities market performance is measured by Liquidity, Integration with the world securities markets, concentration, size, liquidity, volatility, and regulation and supervision in the market. Previous studies illustrate how Securities market performance might enhance economic growth and latest empirical findings affirm this observation. E.g., Demirguc-Kunt and Levine (1996), Singh (1997), and Levine and Zervos (1998) found out that Securities market, development is core in predicting trends in the country's Gross Domestic Product. The World Bank Economic Review

also dedicates in its May 1996 issue to the role of the Securities markets in economic growth. In this study, the researcher applied Securities market capitalization and turnover ratio to measure Securities market development.

1.1.2 Economic Growth

Economic growth is explained as an increase in a country's gross domestic product (GDP). It is also explained as the totality of the good and services that are traded in a country under review. The good and services that represent this totality are but not limited to individual consumption, government spending, foreign expenditure and trade balances. An increase translates to an equivalent increase in the value of goods and services in the economy (Pettinger, 2011).

In recent studies, conclusions have been reached that when the economy does well then there is an automatic equivalent notice on financial development. They hold that for noticeable financial development to be manifested then the economy had to exhibit economic development in all its sectors. In order to sustain a long period of economic prosperity there is need for the economy to be supplied with a stable financial flow. On its own, the financial sector by the market forces fitted itself in the whole economic structure in the development of a nation. It is contended that this model of letting the financial segment to find it owns space in the economy is rather a passive one for the growth process. Gurley and Shaw (1955) and Goldsmith (1969) argued that when the economy does well it automatically spurs financial development, Robinson (1952) and the famous quote that says or avers that, "It seems to be the case that where enterprise leads finance follows". It is therefore conclusive to suggest that when the industry does well and the economy is vibrant and the businessmen are bullish in their investment then economic growth becomes automatic. When finance

becomes unavailable strategies are explored to release it and habits and institutions are developed. The following are the determinants of economic growth: natural resources, labour, Capital, technology, and demand and efficiency factors.

1.1.3 The Link between Securities Market Performance and Economic Growth

Several studies have been conducted in the recent past to try to find the correlation between the level of Securities market development and economic growth. The general assumption is that a functioning Securities market helped to spur economic growth, by availing a pool of domestic reserves and raising the nature of investments (Singh, 1997). Levine argues that Securities market encourages the savings culture by providing investors with additional financial devices that may increase their savings rate (Levine and Zervos, 1996).

Capasso (2003) in his studies on the relationship between the two found that the Securities market stabilizes the environment for borrowing which otherwise shook if business were to depend on the banks alone. Securities markets therefore positively enable and accelerate and sustain economic growth through providing a stable alternative source of firm financing.

The Securities market has another unique effect on the economy in that the process and regulations of the market provides that the takeover mechanisms are executed in a manner that takeovers are efficiently undertaken. It is assumed that when the threat of takeover is real especially hostile the board of directors had to work hard to maximize firm value to overcome a takeover. In practice, the shareholders of a firm were ready to sell their firm to another acquiring company with the promise of reaping profits from the more profitable firms. Thus, Securities market promotes corporate control, by ensuring that listed firms adhere to strict set rules and regulations. This will

enhance financial discipline in the firm which in turn will provide efficiency and better utilization of assets. There is a clearly set procedure on how to manage listed companies to ensure that resources are managed effectively and efficiently (Morck, Shleifer and Vishny, 1990).

A working Securities market often provides information that is necessary for the performance of the economy. A firm therefore reduces the cost of information generation; the market does so through the provision of accurate and on time firm's specific information that reveal through specific efficient Securities prices. This is only possible if the market is well managed and able to generate all the accurate information available. Most investors in the market were willing to participate in the Securities exchange if information is available and lesser in cost thereby it is expected to expand their market investment hence improving resource allocation. Securities prices which are arrived at due to the availability of accurate information made investment expanded thus broadening the funds base of the firms which automatically result to a higher rate of economic growth (Adjasi, 2007). As noted by Greenwood and Smith (1996) efficient and large Securities markets were a catalyst on the mobilization of savings and thereby leading to investment in the most productive technology.

In their works on the Securities market and economic growth, Bencivenga et al (1996) and Levine (1991) found that the market ability to avail securities' liquidity is very essential for the growth of the economy. The Securities acts a buffer for the firms and cushions it from the unwillingness of savers who don't want to relinquish their saving for a long time. The market provides this cushion by providing an avenue for the firms to inexpensively sell and quickly do so hence easing this tension. The equity route of raising and accessing capital in an efficient market is almost permanent as

argued by Kyle (1994) and Holmstrom and Tirole (1993). In the long run the Securities provides incentives for investors to acquire information about firms for better decision making and thus improve corporate governance.

1.1.4 The Nairobi Securities Exchange

The Nairobi Securities Exchange has evolved from an informal Securities trading market without regulations on broking in the 1920s to being one of the best Securities trading market in the world and the leading Securities exchange market in East Africa. Between 1920 and 1953 trading occurred on a gentleman's agreement in which each party was obligated to honor their contractual agreement as dealing took place. It was established and operational in Kenya in 1954 and was registered under the Societies Act (1954) as the Nairobi Securities Exchange (NSE). During this period business took place over telephone or over a cup of tea and prices determined through negotiation between parties. Most regulations enforced at the Nairobi Securities Exchange in 1954 were borrowed concepts from the London Securities Exchange (Kemboi and Tarus, 2012). In 1963, the government came up with a new policy with the aim of transferring economic and social control to citizens (NSE Website, 2017). The NSE operated as a regional market for Kenya, Uganda and Tanzania during this period. In 1990, the Capital Market authority (CMA) was constituted in the Capital Markets Authority Act (Cap 495A) to promote and regulate an orderly, efficient securities market (NSE Website, 2017).

In 1991, the NSE was registered as a company limited by shares under the Companies Act. Due to public outcry, a physical trading location was identified at the IPS building; Kimathi Street, Nairobi (NSE Website, 2017). Over the years, the market has

seen an increase in the number of Securities brokers and the number of players in the market, (Muga, 1974).

Kemboi and Tarus, (2012) stated that the Central Depository System put up in place in 2000 helped to greatly increase the liquidity in the market and also boost efficiency. In 2006, the live trading was implemented on NSE's Automated Trading System for trading in equities. According to NSE's Website, 2017 the ATS also had the capability of trading immobilized corporate bonds and treasury bonds. The trading hours were increased from two hours (10.00am-12.00pm) to three hours (10.00a.m-1.00pm).The new system is real time and has increased transparency. In 2011,the Nairobi Stock exchange changed its name to Nairobi Securities Exchange to reflect its strategic plan that supports a full service trading, clearing and settlement of equities, debt, derivatives and other associated instruments.

Between the years 2004 and 2014, the Securities market capitalization increased from about 250 billion Kenya shillings to 1.9 trillion Kenya shillings in 2014. July 2014, saw the NSE officially launch its Initial Public Offering (IPO) seeking to raise Kshs.627, 000,000 by selling up to 66,000,000 new shares at Kshs. 9.50 per share with the minimum number of shares available for purchase being 500.In October, 2014 the NSE signed a Memorandum of Understanding (MOU) in Korea marking a new collaboration with the Korea Securities Markets (NSE Website, 2017). Although the NSE has had several achievements, Kemboi and Tarus (2012) state that the Kenyan Securities market is still in its infancy.

1.2 Research Problem

The subject as to whether there is any significant linkage between Securities markets and economic growth has become an arguable subject in business and economics. Several studies have been done to assess whether the Securities markets are just betting casinos where players place their bets and put their hopes on mere probability or whether they contribute a significant part in a country's economic growth. Most scholars and economists agree that there is positive linkage between the Securities market performance index and the Gross Domestic Product (GDP) index (Levine, 1991). Using the Securities souk as an economic progression parameter is of great interest to academics, economists and policy makers in order to formulate the most viable policies geared towards wealth creation and improvement of a country's citizens' welfare.

There are conflicting discussions as to the direction of the relationship between the Securities souk and economic progression. Olweny and Kimani (2011) attempted to study if there was a causal relationship between the Nairobi Securities Exchange performance and Kenya's economic growth. Using the Granger causality test and the Vector-Auto Regressive (VAR) model they determined that there was a bidirectional relationship between Securities market variables and the GDP index. According to Kithinji, Oluoch & Mugo, (2014), development of Securities markets has a positive impact on the economy through arrangement of long term securities. Guo, Liu and Cheng (2005) argue that there is no historical data to prove that Securities market development has contributed to economic growth. Economic growth should therefore not be attributed to Securities market performance.

From empirical evidence, in a the local context, Nkukuu (2012) in her study to find out the link between government budget balance and Securities market return mentioned there is correlation between the growth of economy and profitability of companies listed in the Securities market which occurs due to continuous rate of economic growth that had been experienced in the recent times. She further revealed that there are numerous macroeconomic factors which exert pressure on the Securities market performance. This gives an ambiguous likelihood of the findings as to whether the performance of Securities is positively or negatively correlated to Kenya's growth of economy. According to Barako, (2007) certain macroeconomic determinants such as the saving rate, securities market liquidity and financial intermediary affect securities market performance and ultimately economic growth. Therefore, macroeconomic factors which lead to growth of GDP represent a significant basis for the study of relationship between Securities performance to GDP.

Globally, many studies have been made to determine linkage between Securities market performance and economic progression. However, only few of them have their concentration on the Kenyan Securities market popularly known as the Nairobi Securities Exchange. This study therefore aims at determining whether there is a relationship between the Kenyan Securities market development and Kenya's economic growth and the direction of that relationship.

1.3 Objective of the study

This study aims at establishing whether there exists a linkage between Securities market performance and economic growth in Kenya.

1.4 Value of the study

This study will assist future researchers who would like to do more research in the subject of securities market development and economic growth. It will serve as a point of reference for the researchers as they conduct studies in this area. This study also contributes to both theoretical and empirical literature on the impacts of securities market in Kenya's growth and development. The findings of the study equally will enable policy makers to develop a keen interest on the role of securities markets on the economy based on empirical evidence.

Also the study will be appropriate to the investors as once established that there was a link between the securities market development and the economic growth, then they are able to predict when to invest and when to hold back as they can comfortably be able to do the prediction based on the economy growth.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

To determine the correlation between Securities market development and Gross Domestic Product, this chapter reviews studies made on this relationship. The Securities market is the market where financial Securities are traded and where one can raise long-term capital (Osamwony, 2013). In Kenya, this trade happens at the Nairobi Securities Exchange. This chapter also looks into the theories and measures of economic growth and the conceptual framework..

2.2 Theoretical Framework

Several scholars have tried to determine the linkage between economic growth and Securities market variables. Many theories have been developed to elaborate this connection between the capital formation in the Securities market and economic growth, price stability and employment.

2.2.1 The Solow Growth Model

One major assumption of this model is that there are diminishing returns. As the amount of capital increases growth increases at a declining rate. With adequate measures of the two factors of production (labour and capital) the desired sustainable level of economic development was accomplished. The model likewise expect steady comes back to scale henceforth the generation work is expanding and curved and is homogenous of degree one. The production function is thus a Cobb-Douglas function. The theory additionally accepts that the economy is at full employment and there is a steady saving rate. The Solow model has faced criticism in that it fails to recognize

the significant impact of entrepreneurship on economic development as it greatly adds to riches creation in the economy. The hypothesis additionally accepts variable Capital-labor ratio which can barely be resolved freely since it is frequently settled by technology.

2.2.2 Q-Theory

Tobin's Q-theory of investment (Tobin, 1969) attempts to clarify the relationship between Securities market prices and investment that in the end leads to wealth creation and economic development. The Tobin's q is the ratio of the fundamental market value of installed capital and its substitution at current market prices. It can also be referred to as the value the Securities market places on the company's asset over the cost of producing those assets. When the q ratio is high the price of shares is high and firms invest more. If q ratio is greater than one, firms purchase capital Securities to add on to their physical Securities. Firms invest more since the marginal benefit is higher than marginal cost. When q is less than one, firms do not invest in capital and they end up closing down because the marginal cost is higher than the marginal benefit from any investments. Deviations from the relationship where q is greater than unit are said signify an unmeasured source of value and are attributed to the intangible value of the firms (Bharadwaj et al, 1999). The Neoclassical or cost-of-capital model accept that organizations initially decide the coveted Securities of real capital on the premise of costs of labour, capital and expected sales and after that decide the rate of investment on how they wish to achieve the coveted capital Securities amid adjustment cost. Changes in sales and expected yield are the real determinants of speculation. The advantage of using Tobin's Q is that it eliminates the need to calculate the marginal costs or the rate of return.

In any case, Bosworth (1975) noticed that if the high expected yield that builds Securities costs induces higher profit then the market valuation model demonstrates absolutely the effect of expected output.

The relationship of Securities prices with consumption expenditure, total demand and investment once in a while give conflicting outcomes making uncertainty the actual connection between Securities prices and monetary variables that influence a country's level of Gross Domestic Product.

2.2.3 Life Cycle Theory

This is a consumption hypothesis developed by Ando and Modigliani (1963). Individuals base their consumption in light of their lifetime income. During the early stages of one's life an individual consumes mostly from borrowing such as education fund for students and no saving occurs at this stage. In the middle stage of individual's life, one pays off loans consumed in the early stages and saves for old age. The individual is a net saver and wealth accumulation occurs. During old age, the household consumes from savings and no wealth accumulation occurs and the individual is said to be a net-dissaver. Wealth may be held in form of Financial Securities such as shares or bonds.

Poterba (2000) puts it: "it appears to be especially likely that the marginal propensity to consume out of wealth gains up in (locked) retirement accounts is lower than the propensity to consume out of directly held assets since the previous are frequently thought of as long term assets". In terms of realized wealth increase in Securities prices increases an individual's wealth which in turn increases their consumption expenditures. Increase in consumption expenditure causes an expected increase in firms' earnings. This encourages investment in the economy which eventually leads to

increased output resulting in a country's economic growth. In terms of substitution effect Securities prices' transmission mechanism, an increase in Securities prices may lead to further investment and therefore to a postponement of consumption. This lead to lower output and no economic growth occurs. There is a correlation therefore between macro-economic variables such as consumption expenditure and Securities market prices.

The Modigliani theory has been criticized in that sometimes the elderly do not consume wholly from all their incomes or dispose of their assets as stipulated by the hypothesis. Sometimes the elderly save from their incomes hence accumulation of wealth may also occur in old age.

2.3 Empirical Literature Review

Economic growth is an increase in the inflation adjusted price of goods and services produced in a particular country over a given period of time. It includes an increase in the welfare of a nation's citizens (Quah, 2001). Economic growth can be measured as far as the growth in physical capital Securities, increase in size of dynamic labour force, enhanced quality of human capital, technological advancement and increase the demand of a country's goods and services either from domestic or external trade. Gross domestic product (GDP) is the money related estimation of the products and ventures created in a specific nation over a given timeframe (Callen, 2012). The total value of goods and services produced by a country using factors of production owned by the nation's citizens is known as the Gross National Product (GNP). The measure of GNP adjusted for depreciation costs is called the Net National Product (NNP). To determine the per Capita income, one can divide the NNP with the number of people

in the country. The per capita income is used as a measure of welfare or living standards for the people and comparison index for nations, Case et al (2012).

For the past few decades to date, the Securities markets' development linkage to economic growth has become an interesting subject of discussion. Levine and Zervos (1996) used pooled cross-country time-series regression of forty-one countries for the periods between 1976 to 1985 and 1986 to 1993 to determine the association between Securities markets' development and economic growth. The measures used were Stock liquidity, Securities market size, and integration with global markets into index of Securities market development. The growth rate index of GDP per capita was regressed against certain conditions expected to be constant initially such as political stability, investment in human conditions and macro-economic conditions. Their study showed strong correlation between variables in the Securities souk and the GDP of the countries sampled. However, the cross-country growth regression model used, suffered from inconsistency of variables tested across countries, regression statistical problems whereby the regression analysis model assumes that data is obtained from the same population yet it is not the case in the study and conceptual problems since the data occurred simultaneously across the different countries. The regression coefficients needed to be interpreted cautiously. Levine (1991) also suggests that the liquidity of Securities markets allows for diversification of risks by reducing the cost of investment in assets with long payback periods. This encourages investment in the Securities market translating to revenue generation which eventually leads to GDP increase.

Odhiambo (2010) on his study on Impact of Banking sector and Securities Market Development on economic growth in South Africa found that there is fundamental linkage between Securities souk on economic growth. The variables used were

Securities market capitalization, price of traded Securities and income ratio for Securities market performance and used per capita income as the economic growth indicator.

Mwaura, Ngugi and Njenga (2000) established that the level of returns on Securities has an effect on the volume of Securities trading by investors. Huge returns on Securities encourage participation in the Securities market. Low taxation encourages savers to channel their savings into Securities trading in order to enjoy the high returns. This increased investment increases the GDP level of the country.

In their study to discover the heading of the connection between market capitalization, turnover ratio, Securities traded value, the number of listed Securities and the index against the real GDP as the measure of economic growth, Osamwonyi and Kasimu (2013) concentrated their study on Kenya, Ghana and Nigeria. Using data from 1989-2009 and using the Granger causality test, the scholars were able to prove that there was a bi-directional causal link between the Securities market development and the GDP index in Kenya. No causal relationship was established on the Securities souks development with the Ghanaian and Nigerian economic growth. The test notwithstanding, demonstrated that there was a positive bi-directional and causal connection between market capitalization and number of listed Securities and economic growth for all the three countries. The Securities Turnover ratio had a bi-directional causality relationship on the economic growth while Securities traded value has a negative effect on the GDP.

Some economists argue that increase in liquidity of Securities in the Securities market affect investors' investment decisions negatively. Bhide (1994) argues that liquid Securities markets affect corporate governance this in turn discourages some investors

from making long-term investment into such market due to the volatility of expected returns. In this case, liquidity of Securities causes a decrease in economic growth.

Olweny and Kimani (2011) utilized the Granger causality examination and Vector Auto Regressive (VAR) model to attempt and research the impact of Securities performance on Kenya's GDP increment. This study used the NSE 20 share as a variable for the regression model. The markets' expectations of higher dividends and corporate profits results ultimately in increase in the GDP.. The results proved that there exists positive correlation between Securities market performance and the country's economic growth.

Makau, Onyuma and Okumu (2012) did a study on the relationship between the liquidity of returns on shares of companies cross-listed on the East Africa Securities exchange markets and cross-border listing. Cross-listing helps to diversify investors' risk portfolios associated with share trading enabling them to operate on reduced costs of their equity capital. Cross-listing affects the Securities liquidity both negatively and positively and therefore contributes to a country's economic growth. When Securities liquidity increases, investors had more ways to utilize their investment opportunities as there is more money to invest in viable projects with greater returns.

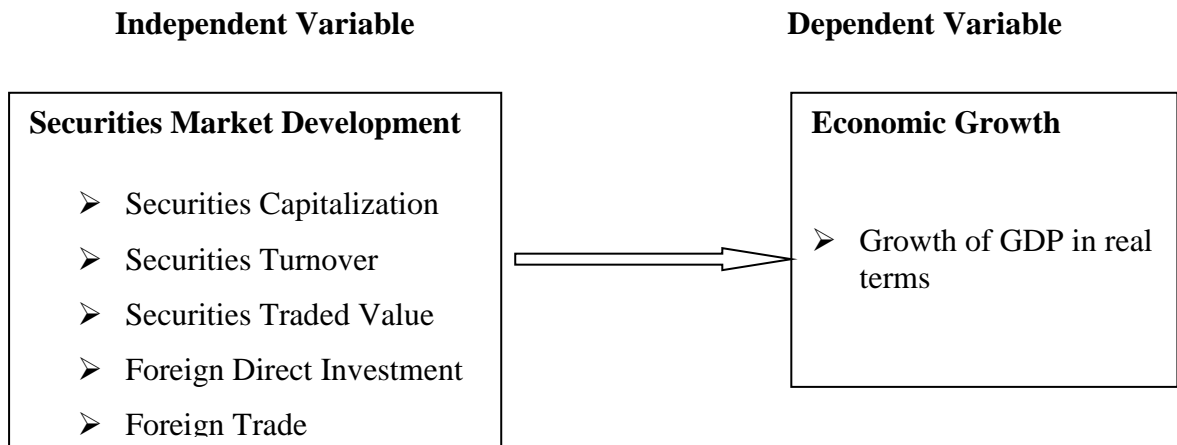
As per Wahome (2010), there is a unidirectional causality connection between the NSE 20 share index and economic performance in Kenya. In his endeavor to evaluate the long haul connection between economic growth and Securities market performance in Kenya; he used the Vector Auto Regressive (VAR) model and GDP as a measure of economic growth. For Securities market development, Securities market turnover ratio and aggregate value traded to GDP (liquidity) as a measure of growth. The outcomes demonstrated that there is a two-sided causal connection

between turnover ratio and economic growth although no causal linkage exists between Securities liquidity and GDP increases.

There is correlation between economic progression and profitability of companies listed in the Securities exchange market (Nkukuu, 2012). However macroeconomic factors, for example, Inflation, exchange rates, interest rates and security in Kenya that influence investment rate may influence investment in the Securities market which thus influences the growth of the economy. The direction of this relationship is not stipulated in the study. Aduda *et al* (2012) established that macroeconomic factors may affect economic growth negatively or positively. Those that cause a positive increase in GDP are more relevant in establishing this stochastic relationship.

2.4 Conceptual Framework

This section summarizes the securities market development parameters under research and their impact on the Economic growth. The securities market performance parameters are the sovereign variables while the economic development is the dependent variable. The securities market performance was measured by the market capitalization, Securities turnover; Securities traded values, foreign direct investment (FDI) and foreign trade as the independent variable while the economic advancement was assessed by the growth of GDP in real terms. The conceptual framework developed by the literature review is illustrated as follows;



The following is a brief definition of the Variables: Market capitalization is the total of value of listed shares in the market. Securities Turnover is the gross value of shares traded in the market. Securities Traded Value is the values of shares traded during the period. Foreign Direct Investment this is the value of investments done by foreigners in the country. Foreign direct investment can be good predictor of economic growth since as economy grows investors would be attracted to invest in that country. Foreign Trade is an exchange of capital, goods and services across countries. Foreign trade is measured by Balance of payment which is the difference between the net exports and net imports in a country.

2.5 Summary of Literature Review.

The Securities market plays an important role in the economy. However, scholars are yet to come to a consensus as to the direction of the linkage between economic progression and Securities souk performance. Several scholars argue that the upward performance of Securities souks had a positive effect on a country's GDP increase. Some studies have demonstrated that there is a connection between Securities market variables such as Securities turnover ratio, Securities liquidity and Securities market risk diversification. A unidirectional causality connection between Securities souks and monetary development infers that the Securities market influences financial sector

as well as influences capital accumulation and technological advancement in the economy. If the unidirectional relationship stems from economic growth to financial market performance, then economic growth is required for financial sector improvement in the country.

Among economists and other researchers, the general agreement is that countries with more developed securities markets have more developed economies while the developing nations have less developed securities market. The relationship in the Securities market and GDP is more pronounced in the less developed and developing nations. However, this relationship is dependent on the time series and is more articulated in the long run. In the short run, very small changes (almost negligible) occur which are almost hard to measure hence cannot be used in fact finding.

From the empirical studies, no agreement has been reached as to the direction of the relationship between economic progression and Securities souk performance.

Some economists argue that increase in liquidity of Securities in the Securities market affect investors' investment decisions negatively. Bhide (1994) argues that liquid Securities markets affect corporate governance this in turn discourages some investors from making long-term investment into such market due to the volatility of expected returns. In this case, liquidity of Securities cause a decrease in economic growth.

Olweny and Kimani (2011) utilized the Granger causality examination and Vector Auto Regressive (VAR) model to attempt and research the impact of Securities performance on Kenya's GDP increment. This study used the NSE 20 share as a variable for the regression model. The markets' expectations of higher dividends and corporate profits results ultimately in increase in the GDP.. The results proved that

there exists a positive relationship between Securities market performance and the country's economic growth.

Makau, Onyuma and Okumu (2012) did a study on the relationship between the liquidity of returns on shares of companies cross-listed on the East Africa Securities exchange markets and cross-border listing. Cross-listing helps to diversify investors' risk portfolios associated with share trading enabling them to operate on reduced costs of their equity capital. Cross-listing affects the Securities liquidity both negatively and positively and therefore contributes to a country's economic growth. When Securities liquidity increases, investors had more ways to utilize their investment opportunities as there were more money to invest in viable projects with greater returns.

As per Wahome (2010), there is a unidirectional causality connection between the NSE 20 share index and economic performance in Kenya. In his endeavor to evaluate the long haul connection between economic growth and Securities market performance in Kenya; he used the Vector Auto Regressive (VAR) model and GDP as a measure of economic growth. For Securities market development, Securities market turnover ratio (market capitalization to GDP) and aggregate value traded to GDP (liquidity) as a measure of growth. The outcomes demonstrated that there is a bi-directional causal connection between turnover ratio and economic growth while no causal linkage exists between Securities liquidity and GDP increases.

There is correlation between economic progression and profitability of companies listed in the Securities exchange market (Nkukuu, 2012). However macroeconomic factors, for example, Inflation, exchange rates, interest rates and security in Kenya that influence investment rate may influence investment in the Securities market which thus influences the growth of the economy. The direction of this relationship is

not stipulated in the study. Aduda *et al* (2012) established that macroeconomic factors may affect economic growth negatively or positively. Those that cause a positive increase in GDP are more relevant in establishing this stochastic relationship.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This part concentrates on the research outline of the study. It particularly addresses; Population, Sample, data collection and data analysis, which depict the firms' and variables, included in the study and applied statistical techniques employed in deciding if there exist a connection between Securities market performance and economic growth.

3.2 Research Design

The main aim of the study is to assess whether there exist a relationship between the securities market development and economic growth in Kenya. As per Cooper and Schindler (2000) they found out that causal research design is less explicit in business studies and hence the most desirable design for this study. Therefore, the study focuses on the casual relationship between the securities market development and economic growth in Kenya.

Business relationships of cause and effect are not always obvious, hence this design will provide a better understanding of the associations of variables thus simplifying the design to explain the association of variables. The overall purpose is to help the investors, policy makers in make decisions on policy directions and predictions on the security market performance and economic growth.

3.3 Population

The population composition was Nairobi Securities exchange. Additionally the general performance of the Kenya economy as measured by the gross domestic product (GDP).

3.4 Data Collection

Secondary data was collected in the form of annual- quarterly for a period of eleven years (2006-2016). The GDP data was gotten from the Central Bank of Kenya (CBK) while the rest of the variables data was sourced from the Nairobi securities exchange (NSE).

3.5 Data Analysis

Regression model was used to analyze the data to show the impact of the securities market development on the economic growth in Kenya. Coefficients of variation were also performed to test the relationship and ANOVA to show the significance of the variables or relationships.

The model of the study is :

$$Y=f(X1, X2, X3, X4, X5,)$$

Gross Domestic Product (GDP) was taken as the dependent variable denoted by Y while (X1 to X5) – are the independent Variables.

X1- Securities capitalization

X2- Securities turnover ratio

X3- Securities traded value

X4- Foreign Direct Investment (FDI)

X5-Foreign Trade.

Thus the general econometric equation:

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5$$

Where:

Y Gross Domestic Product (GDP)

α_0 - constant

β_1 - β_4 - co-efficient

Even though the variables X_1 to X_3 are related least square coefficient of variations was run to ensure that the right correlation is found and that the research arrived at the right conclusion.

3.6 Data Reliability and Validity

Mugendu and Mugenda (2004) declared that, the precision of data to a great extent relied upon the data collection instruments as far as legitimacy and unwavering quality. Robinson (2002) Explains validity as the extent to which results obtained from the analysis of the data truly represents the parameters under test. This was achieved through corroborating the data from various sources. To ensure data reliability I had to visit the Kenya bureau of statistics and randomly picked the different years figures and compare with those provided by CBK which they were the same. Reliability is the ability to which research instruments yield consistent results (Mugenda and Mugenda 2003). This was enhanced by collecting data from credible institutions' such as Central bank and Nairobi securities exchange.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter discusses the findings and interpretations with regard to the study objective. The objective of this study was to find out the relationship between securities market development and economic growth in Kenya. In this chapter, the inferential statistics of the study variable are discussed. Data obtained was computed for independent variables of Securities capitalization, Securities turnover, Securities traded value, Foreign Direct Investment (FDI) and Foreign Trade against the dependent variable of Gross Domestic Product (GDP). The data was then coded and entered into the SPSS version 22. The following subsections illustrate the findings.

4.2 Inferential Statistics

This section involves the correlation analysis and regression analysis used to determine the relationship between securities market development and economic growth in Kenya.

4.2.1 Correlation Analysis

Correlations measure how variables or rank orders are related. The bi-variate correlations procedure computes the pair wise associations for a set of variables and displays the results in a matrix. At this stage of the study correlations is useful for determining the strength and direction of the association between two variables at a time.

In this study, Pearson Product-Moment Correlation Coefficient was applied to scrutinize the relationship between Securities market development and economic growth in Kenya. The results are shown in Table 4.1.

Table 4.1: Correlation Analysis

	GDP	Securities capitalization	Securities turnover ratio	Security traded value	FDI	Foreign Trade
Pearson	1.000					
GDP	1.000					
Securities capitalization	.545	1.000				
Securities turnover ratio	.491	.515**	1.000			
Securities traded value	-0.469	.377	.412	1.000		
FDI	.856**	.254	.014	.356	1.000	
Foreign Trade	.707**	.328	.112	.239	.029	1.000

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

* . Correlation is significant at the 0.05 level (2-tailed).

From the findings in Table 4.1, there was a strong positive correlation between FDI and GDP as shown by correlation coefficient of 0.856. These results imply that better FDI strategies had an impact on the growth of GDP. In addition, the study found a strong positive correlation between foreign trade and GDP as indicated by a correlation coefficient of 0.707. This is an indication that excellent foreign trade measures play a vital role in GDP resulting in better economic growth. Also, Securities capitalization and GDP had a correlation coefficient of 0.545, therefore denoting a positive relationship.

This is an indication that Securities capitalization is a measure that is sufficient to positively affect GDP of a given nation thus promoting economic growth. Furthermore, there was a positive relationship between Securities turnover ratio and GDP as indicated by a coefficient of 0.491, meaning that liquidity of Securities

markets allows for diversification of risks by reducing the cost of investment in assets with long payback periods hence increase in economic growth. However, there was a negative relationship between Securities traded value and GDP as shown by a coefficient of -0.469. This is an indication that Securities traded value has a negative effect on the GDP.

4.2.2 Regression Analysis

In order to test the relationship independent variables (Securities capitalization, Securities turnover ratio, Securities traded value, Foreign Direct Investment (FDI) and Foreign Trade) and dependent variable (Gross Domestic Product), a multiple linear regression was done. The regression involved use of Ordinary Least Squares (OLS) since the study had more than two variables. The findings were indicated in Table 4.2.

Table 4.2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.796 ^a	.633	.615	.54154

a. Predictors: (Constant), Securities turnover ratio, Securities traded value, Foreign Direct Investment (FDI) and Foreign Trade

From the analysis in Table 4.2, the coefficient of determination (R^2) equals 0.633. Coefficient of determination elucidates the percentage of variation in the dependent variable that is explained by the independent variables. It is used to explain the extent to which changes in the dependent variable can be explained by the change in the independent variables. In this study, coefficient of determination (R^2) indicated that the independents variables (Securities turnover ratio, Securities traded value, Foreign

Direct Investment (FDI and Foreign Trade) contributed to 63.3% of the variation in Gross Domestic Product (GDP). This therefore means that other factors not studied comprised of 36.7%.

The study conducted an Analysis of Variance in order to test the significance of the model. The results were indicated in Table 4.3.

Table 4.3: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	3.015	3	.859	41.751	.000 ^b
Residual	5.657	95	.021		
Total	8.672	98			

a. Dependent Variable: GDP

b. Predictors: (Constant), Securities turnover ratio, Securities traded value, Foreign Direct Investment (FDI) and Foreign Trade

From the ANOVA results in Table 4.3, the probability value of 0.000^b was obtained implying that the regression model was significant in predicting the relationship between dependent variable (GDP) and the predictor variables (Securities turnover ratio, Securities traded value, Foreign Direct Investment (FDI) and Foreign Trade) as it was less than $\alpha=0.05$. In addition, the overall model was significant at 5% level of significance because the F calculated (41.751) was greater than the F critical (value = 2.47 within 98 degrees of freedom), thus a substantial association amongst Securities turnover ratio, Securities traded value, Foreign Direct Investment (FDI) and Foreign Trade and GDP.

Table 4.4: Coefficient of Results

Coefficients^a

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	.250	.042		5.964	.000
Securities capitalization	.297	.076	.207	2.575	.012
Securities turnover ratio	.134	.082	.530	6.479	.000
Securities traded value	-0.210	.092	-0.173	2.286	.024
Foreign Direct Investment (FDI)	.312	.017		1.611	.001
Foreign Trade	.309	.065	0.534	1.674	.023

a. Dependent Variable: GDP

From the regression model; $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3+ \beta_4X_4+ \beta_5X_5+ \varepsilon$, the established regression equation was; $Y= 0.250 + 0.297X_1 + 0.134X_2 - 0.210X_3+ 0.312X_4+ 0.309X_5$. The results in the regression model insinuate that holding all

independent variables (Securities turnover ratio, Securities traded value, Foreign Direct Investment (FDI)) constant at zero (0), GDP would have been 0.250.

In addition, the findings in Table 4.5 illustrate that holding all other independent variables at zero, a unit upsurge in Securities capitalization led to a 0.297 increase in GDP, a unit gain in Securities turnover ratio led to a 0.134 intensification in GDP, while a unit rise in Securities traded value led to a -0.210 decrease in GDP. Furthermore, a unit increase in Foreign Direct Investment (FDI) led to a 0.312 increase in GDP while a unit increase in Foreign Trade led to a 0.309 rise in GDP. This implied that Foreign Direct Investment (FDI) had the highest influence on GDP followed by Foreign Trade, Securities capitalization and Securities turnover ratio while Securities traded value had a negative influence on GDP. The obtained regression equation additionally inferred that there was a direct relationship between Foreign Direct Investment (FDI), Foreign Trade, Securities capitalization and Securities turnover ratio and GDP while there was an inverse relationship between Securities traded value and the GDP.

4.4 Summary and Interpretation of Findings

The research objective that was set out was to determine the relationship between securities market development and economic growth in Kenya. The study adopted five independent variables and one dependent variable. The regression results indicate that 63.3% (represented by R^2) change in the dependent variable, which is GDP, could be explained by changes in the independent variables, that is Foreign Direct Investment (FDI), Foreign Trade, Securities capitalization and Securities turnover ratio.

The results indicate a significant relationship between Securities capitalization and GDP. The findings agree with those of Seetanah (2009) who while using panel Vector auto regression, find positive significant relationship between Market capitalization ratio, value traded ratio with both having a significant positive relationship with GDP. It is worth noting that the stock market size has been significantly influenced by new listings in the Nairobi Securities Exchange which may have played a significant role in increasing the variables for example Safaricom Kenya listing in 2008.

The negative coefficient of the Securities value traded ratio can be explained partly due to the volatility in the stock market due to macroeconomic factors that affect the investors demand and supply for stocks. For example the negative effects on the stock market as a result of the political environment in Kenya. From the data observation it can be seen that in the periods covered by disputed election period such as 2007 and 2008 the Value traded ratio is affected significantly by the effects of the electioneering periods especially the 2007-2008. From the observations, the Value traded ratio dropped by 0.88 percentage points in the period following the 2007-2008 general election in Kenya and by 0.88 percentage points from 4.46 to 3.58 in the period following the disputed 2007 December general election. Another possible explanation may be that value traded as measured in the study does not necessarily foster resource allocation in the economy and therefore the negative coefficient, which is consistent with empirical growth literature.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

Although Foreign Direct Investment (FDIs) may increase capital inflows for the host economy in emerging economies, over-dependence on FDIs has increasingly proven to be unreliable in the long run due to economic uncertainties such as the financial crisis of 2008-2009 in Kenya. FDIs are also said to increase negative externalities for the host economy hence more developing economies such as Kenya are opting to increase their capital inflows through other means such as making their securities markets more effective to encourage investment and ultimately as a revenue generating tool.

This study aimed at determining if there exists any linkage between securities Market performance and economic growth. Throughout the study it has been proven that there is a general consensus among scholars as to the existence of a causal relationship between security Markets' performance in Kenya and the economy's Gross Domestic Product. For this particular study, a time series data for eleven quarterly years between 2006:Q1 and 2016:Q4 was used to attempt to determine the direction of the linkage between Securities turnover, Securities Capitalization, Securities traded value and Foreign trade with Kenya's GDP.

From the Correlation Analysis, it was determined that Securities traded value and GDP are negatively correlated while there exists positive correlation between FDIs, Foreign Trade and Securities Capitalization. The negative correlation between securities value traded ratio to GDP is considered to be caused by liquidity in stock

caused by macroeconomic factors that trigger changes in investor's demand or supply for stocks. Regression Analysis showed that Securities turnover, Securities traded value; Foreign Direct Investment (FDI) and Foreign Trade contribute to 63.3% of the variation in GDP while other factors out of the study contribute to 36.7% of the country's GDP.

5.2 Conclusions

The study shows that there is linkage between securities Market performance and economic growth in the Kenyan context. Financial Deepening in the capital market which is determined by securities turnover ratio, securities traded value, FDIs, and foreign trade are the major factors that contribute to the country's economic growth. Future economic activity can therefore be predicted using performance and development at the Capital Market especially the Nairobi Securities Exchange. An increase in stock prices today for instance will result to higher returns for investors in the future which in turn lead to increased investment and this ultimately leads to a higher GDP for the country. The stock performance can therefore be used to predict Gross Domestic Product future trends.

The findings are consistent with previous research conducted by Maina (2013) who indicated that three out of the five Securities Market deepening variables have a significant positive effect on GDP, with Value Traded Ratio and Market Capitalization Ratio having significant negative correlation with GDP growth. Sambu (2013) showed that securities market indices have impacted significantly on the GDP. From the study, the significant role of the Nairobi Securities Exchange in economic growth has been rolled out. It is therefore necessary for the Kenyan government to introduce incentives that encourage saving among its citizens to improve investments

since savings are directly proportional to investments and thereafter increasing economic growth.

5.3 Recommendations

The government should implement policies that encourage savings such as increased interest on savings by Financial Institutions. Increased savings increases investment which increases capital formation among citizens and this improves the welfare of the citizens. Solow's Growth model tries to illustrate this by elaborating that savings are directly proportional to savings.

Given the fundamental role the Nairobi Securities Exchange plays in Kenya's economy, the Capital Markets Authority (CMA) should continually ensure that the NSE is integrated into the global markets and also implement favorable policies that encourage foreign investment. Increased foreign investment increases capital inflows in to Kenya and this enhances economic growth.

Increasing popularity through increased marketing of the NSE globally and domestically which helps to encourage more investment into the market. This increases the number of securities traded in the market, generating more revenue for investors and eventually improving living standards of the country's citizens by increasing the per capita income of individuals.

Proper management and regulation of the NSE by the Capital Markets Authority to ensure trading occurs in a regulated manner. The capital markets authorities should enact robust strategies to ensure that investors do not buy securities and hold instead of regular trading the capital market. This helps to build investor confidence and encouraging investment in the market. Proper regulation also improves the NSE's

credit ratings in international Securities markets. Diversification of financial goods in the Securities market and not restricting it to bonds and equities only will help to improve its rating and encourage more investors to invest in the market.

5.5 Limitations of the Study

There are other indicators of financial deepening in the securities market outside of this study such as political shocks, investment confidence in the securities market, inflation, and foreign exchange rates that also contribute to the stock souk performance that cannot be entirely ignored. These factors contribute to securities performance but since they are hard to measure they were not included in this study.

Data obtained for this study covered an eleven year period between 2006 and 2016. This time frame may be inadequate for one to make an inference on the variables studied. Studies of this nature normally require data from a longer time series such as several decades to come up with more conclusive results. For a significant change to be realized, economic performance and trends in stock market performance take longer periods.

5.6 Recommendations for Further Research

For more conclusive results, further research on the subject should be done for longer time periods. This can be done for most recent years taking into consideration recent reforms put into place such as online trading in the Nairobi Securities Exchange.

A research that includes other indicators of market performance such as political shocks and other external factors not included in this study should be done to evaluate the impact of such on economic growth and securities market performance. This will ultimately show whether the impact of such factors is greater than that of securities

performance indicators on economic growth. Further research should be done on the same subject in other Sub-Saharan Africa countries for comparison purposes with this research done for the Kenyan economy.

REFERENCES

- Aduda, J. (2012). *Financial Inclusion and financial Sector Stability with Reference to Kenya*. University of Nairobi, Kenya
- Bagehot, W. (1962). *Lombard Street*. Homewood ILL: Richard D. Irwin.
- Biekepe K. and Adjasi B. (2006) Securities exchange and economic growth: the case of African countries. University of Stellenbosch Business School, Cape Town, South Africa. Cambridge, MA.42
- Capasso S. (2006). *Endogenous Information Frictions, Securities Market Development and Economic Growth*. The Manchester School Vol. 76
- Cooper, D. R., & Schindler, P. S. (2006). *Business research methods*. Boston: McGraw-Hill Irwin.
- Emmanuel, A. B. (2002). *Financial Development And Growth: Theory and time series evidence from 26 countries*. Evidence from Kenya using Causality Test Approach . International Science Finance and Accounting, 3(5), 57-66. from South Africa. The African Finance Journal, 12(2), 72-92. Ghana, Kenya and Nigeria. International Journal of Financial Research, 4(2), Finance, 46(4), 1445-1465.
- Greenwood J. and Smith B. (1996) Financial Markets in Development and the Development of Financial Markets Journal of Economic Dynamics and Control, Vol.21. Growth. Quarterly Journal of Economics. *growth in Kenya*. (Doctoral dissertation). University of Nairobi, Kenya. *growth: case study of Nairobi stock exchange*. (Doctoral Dissertation). Harvard University Press.
- Holmstrom B, and Irole J. (1993) Market Liquidity and Performance Monitoring. *Journal of Political Economy*, Vol. 101.
- Johansen, S. (1988). Statistical Analysis of Cointegration Vectors. *Journal of Economic Dynamics and Control*, 12, 231-254.
- Kemboi, J. K., & Tarus, D. K. (2012). Macroeconomic Determinants of Securities Market

- King, R., & Levine, R. (1993). *Finance and Growth: Schumpeter Might be Right*. The
 Levine, R. (1991). Securities Markets, Growth and Tax Policy. *Journal of
 Finance and growth; Schumpeter might be right*. World Bank working paper.
- Kithinji, J. G., Oluoch, W., & Mugo, R. (2014). *What Is the Effect of Rights Issue on
 Firms Share Performance in the Nairobi Securities Exchange?*.
- Levine R. (2004). *Finance and growth: Theory and evidence*. NBER working paper
 series, 1076,
- Muga D.N. (1974). *The Nairobi Securities Exchange; it is History, Organization and
 Role in the Kenyan Economy*. Unpublished MBA Dissertation University' of
 Nairobi
- National security exchange (2017). *History of Nairobi Security Exchange Retrieved
 on October 2, 2017 from www.nse.co.ke*
- Olweny, T., & Kimani, D. (2011). *Securities Market Performance and Economic
 Growth*
- Osamwonyi, I. O. (2005). Capital market imperfections and community economic
 development in Nigeria. *A paper presented at the Academy of Management,
 Abuja, Nigeria*
- Osamwonyi, I. O., & Kasimu, A. (2013). Stock market and economic growth in
 Ghana, Kenya and Nigeria. *International Journal of Financial Research*, 4(2),
 83.
- Owiti, J. (2012). *The relationship between stock market development and economic*
- Schumpeter, J. (1911). *The Theory of Economic Development*. Cambridge MA:
- Shaw S. (1973). *Financial Deepening in Economic Development*. Oxford University
 Press, NewYork.
- Shleifer A. and Vishny R. (1997). *A survey of corporate governance Journal of
 Finance*, 52(2).
- Singh A. (1997). Financial liberalization, Securities markets and economic
 development. *Economic Journal*, 107.

Tobin, J. (1969). A general equilibrium approach to monetary theory. *Journal of money, credit and banking*, 1(1), 15-29.

University of Nairobi, Kenya.

Wahome, M.R. (2007-2010). *Impact of stock market development on economic.*

APPENDIX: DATA COLLECTION FORM

	R_GDP	Mkt Capitalization	Volume of Equities Traded	Equity Turnover	Foreign Direct Investment (% of GDP-Liabilities)	Overall BOP Balance (% GDP)
2006Q1	6.0	483334	69	3692	0.135260286	3.29094178
2006Q2	6.2	623204	142	8442	0.139933459	4.366551511
2006Q3	8.2	726971	177	12378	0.19418313	3.948225031
2006Q4	4.9	791580	77	5771	0.18968533	2.524730634
2007Q1	7.1	696917	114	6955	0.223816904	2.47001507
2007Q2	8.3	743906	151	6079	0.253760063	1.338327361
2007Q3	6.3	791660	275.7	9,902	0.285441482	1.490296363
2007Q4	6.4	851133	141	6018	1.690991656	2.513697173
2008Q1	1.1	797281	181	7321	2.138883708	2.181808569
2008Q2	2.2	1230677	2155	22130	2.149618295	2.010383522
2008Q3	2.6	972267	485	6788	2.186468596	0.845411257
2008Q4	0.2	853880	171	4617	0.669008776	-1.306113314
2009Q1	6.2	689045	207	2414	0.021369819	1.889148383
2009Q2	1.9	821762	378	4127	0.03169576	1.156357137
2009Q3	1.9	771612	232	3548	0.040883804	-1.85812463
2009Q4	1.2	877365	215	2591	0.052075337	-3.011318981
2010Q1	6.6	983117	627.00	8,325.6	0.044897799	-2.948159398
2010Q2	7.6	1133200	365	6804	0.042607619	-2.388825554
2010Q3	7.9	1174	804.41	7732	0.041516103	-0.942138177
2010Q4	11.6	1167	357.61	5,885.41	0.037786098	-0.436212341
2011Q1	7.5	1090	469	7,984.12	0.034914451	-0.415881567
2011Q2	6.6	1121440	411	7048	0.035655814	0.255970351
2011Q3	6.1	885571	582	5453	0.036182943	1.710678982
2011Q4	4.4	868241	337	3973	0.038929308	2.135896297
2012Q1	4.2	940796	351	3544	0.032714244	0.741805094
2012Q2	4.3	1048717	386	6214	0.033015595	-0.661839658
2012Q3	5.0	1155988	470	9782	0.032789677	-1.731713325
2012Q4	4.7	1272002	461.89	7582	0.032389126	-2.426780715
2013Q1	6.1	1599798	571	11183	0.027564767	-1.022700915

2013Q2	7.5	1618270	728	13021	0.026398002	-0.837319493
2013Q3	6.4	1790854	489	10062	0.02525099	-0.717136319
2013Q4	3.5	1920718	466	11329	0.023576853	-0.670052874
2014Q1	5.2	2000473	544	13043	0.019506446	-1.149821499
2014Q2	6.0	2106691	731	18190	0.017948746	-3.624301768
2014Q3	4.6	2295950	767	19241	0.016492877	-2.099275871
2014Q4	5.6	2300054	900	31583	0.015206378	-2.366141885
2015Q1	5.8	2444829	614	20517	0.012460806	-2.017295706
2015Q2	5.6	2254237	681	24251	0.011785464	1.915956679
2015Q3	6.1	2063644	434	14375	0.01091803	1.395302457
2015Q4	5.5	2049539	475	15110	0.009908689	0.399219895
2016Q1	5.3	2078280	536	13449	0.00836036	-0.171100714
2016Q2	6.3	1994814	601	17247	0.007288187	-1.739088834
2016Q3	5.7	1969299	747	16872	0.006122347	-2.440713477
2016Q4	6.1	1931607	289	7107	0.005486836	-0.182968178
2017Q1	4.7	1894344	637	12461	0.005664834	-0.938950992
2017Q2	5.0	1862163	749	17144	0.006400914	-0.566711007