

**RELATIONSHIP BETWEEN CAPITAL MARKET DEVELOPMENT AND
ECONOMIC GROWTH IN KENYA**

BY:

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DECLARATION

This research project is my original work and has not been submitted for academic purposes in any institution of higher learning.

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DEDICATION

I dedicate this work to my parents Mr. and Mrs. Leonard Sambu for their love, support and encouragement, also for their determination to educate me and for their exemplary support and inspiration all through.

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LIST OF ABBREVIATIONS

CTD:	Conventional total deposits
CTL:	Conventional total loans
CMA:	Capital Markets Authority
DFIs:	Development Financial Institutions
FDI:	Foreign Direct Investments
GDP:	Gross Domestic Product
IMF:	International Monetary Fund
ITD:	Islamic total deposits
ITF:	Islamic total finance
IPO:	Initial public Offering
MCR:	Market Capitalization Ratio
NBFIs:	Non-banking financial institutions
SAP:	Structural Adjustment Programme
TFP:	Total Factor Productivity
NSE:	Nairobi Securities Exchange
SMEs:	Small and Medium Enterprises

ABSTRACT

This study examines the development of the Kenyan capital market and its relationship with economic growth and development between 1990 and 2011. Data was collected from Capital Markets Authority reports, Nairobi Securities Exchange Review Reports, Central Bank of Kenya Statistical Bulletin and ordinary least square method of regression was used with aid of STATA version 10 software packages to analyze the data.

This study aims to examine the roles and challenges of capital markets, with special focus on Kenya. The study draws on economic theory to assess the potential role of capital markets, in terms of consumption, investment and economic growth; more specific roles with respect to corporate financing, asset pricing and corporate governance are highlighted. It is argued that the macroeconomic policy environment is critical in influencing the performance of capital markets and hence the extent to which the market may be able to play its role. The status quo of the markets is analyzed in terms of stock market capitalization, number of companies listed, liquidity, returns and volatility of the capital markets in Kenya. The main institutional challenges are considered in the light of market microstructure evidence on how the frontier capital markets in Kenya are responding to revitalization and reforms. The study concludes by pointing out some unresolved issues, undiscovered territory and the future of capital markets in Kenya.

The study focused on data from the Nairobi Securities Exchange and Kenya National Bureau of Statistics. Time series data on stock market turnover, stock market size and bond market size were obtained from period 1992-2011. The research used quarterly data on economic growth indicators as provided by The Government of Kenya

through the Kenya Bureau of Statistics as well as World Bank development indicators.

This study will utilize the value traded ratio in the capital markets, which is a measure which equals the total value of bonds and shares traded divided by the Gross domestic product of the economy. This indicator of growth indicates the liquidity observed in the capital market. In this research this ratio will be used to compliment the market capitalization rate as a measure of growth of the capital market.

STATA version10 was used to analyze the data. Tests of significance included the R2 tests as well as F-statistics which tested the significance of the relationship between the five independent variables of capital market deepening and the one dependent variable of economic growth.

The results showed that capital market indices have impacted significantly on the GDP. The study recommends among others that government should put up measures to build up investors' confidence in the capital market by fair transactions, increase investments instruments in the market and provide other basic infrastructures to boost investor participation in the bourse.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Financial sector plays a crucial role in economic development. The depth of the financial sector has generally been found to promote economic growth. It has been observed that well functioning capital markets increases economic efficiency, investment and growth. The capital market is important since it connects the financial sector with other non-financial sectors of the economy. This study examines the effect of Capital Market Deepening on economic growth in Kenya.

Kenya's capital market has been described as narrow and shallow. The stock market and private bond market have been raising less than 1% of growth financing. The vision 2030 development plan aims to achieve an annual economic growth of 10% with an investment rate of 30% to be financed mainly from mobilization of domestic resources. There has been significant focus on the capital market with for example the institutional development of the stock market and introduction of new instruments in the bonds market. It has been assumed that these efforts will facilitate mobilization of adequate resources and allocation of these resources efficiently to achieve growth objectives.

This study therefore aims at answering the question on whether capital market deepening facilitates economic growth. This is analyzed by studying the contribution of the capital market in financing investment, the relationship between capital market deepening and productivity and finally, the relationship between capital market deepening and economic growth.

1.1.1 Capital Market Development

According to Demirguc and Levine (1996), Long term capital is deemed crucial for economic development as evidenced by the positive relationship between long term capital and economic growth,. In recognition of this, Kenya kicked-off the revitalization of the stock market in the late 1980s. In early 2000, it set out to revitalize the bonds market by strengthening the government bonds market.

Despite the initiatives, the stock market that has been in existence for over 50 years is still shallow, narrow and thin. The bonds market is also in its infancy stage attracting more of the government bonds compared with corporate bonds. According to Ngugi and Njenga (2005), Development Financial Institutions (DFIs) set up at independence to close the resource gap for long term capital faced various problems that constrained to their performance. As a result investors have relied on banks for short to medium terms loans. Further, savers have had to contend with a thin financial basket.

Kenya's long term development agenda spelt out in the vision 2030, targets an annual growth rate of 10% in the medium term with an investment rate of 30% of which a significant proportion will be financed through mobilizing domestic savings. While Kenya's financial sector is viewed as substantially diversified, it is dominated by banking institutions which have not evolved to provide long term capital adequately. The equity and debt market are struggling to gain momentum. The development financial institutions have also not been performing. If the anticipated investment level is to be achieved, it means that the financial sector must mobilize adequate and appropriate finance to meet the financing needs.

Capital market development is an important component of financial sector development and supplements the role of the banking system in economic development. Specifically,

capital markets assists in price discovery, liquidity provision, reduction in transactions costs, and risk transfer. They reduce information cost through generation and dissemination of information on firms leading to efficient markets in which prices incorporate all available information [Yartey and Adjasi (2007), Garcia and Liu (1999)]. Overall, stock markets provide market liquidity that enables implementation of long term projects with long term payoffs thereby promoting a country's economic growth endeavour. Moreover, efficient capital markets not only avail resources to investors, they also facilitate inflow of foreign financial resources into the domestic economy.

The fact that the debt and equity market are not thriving has seen the credit market play a significant role in financing investment while deposits form a significant proportion of the financial assets basket. The recent experience with KenGen and Safaricom IPOs which saw huge oversubscriptions is an indication that there is pursuit for a diversified financial asset basket among savers. The liquidity shifts witnessed in the banking institutions saw some banks increase their deposit rates to compete for the deposits; a sure demonstration that access to alternative financial asset heightens competition in the sector. Capital market development therefore enables financial deepening by enabling the savers to diversify their financial asset basket and the firms to have access to alternative sources of financing. This raises questions such as whether capital markets facilitate deepening the financial sector, how the capital market interact with other financial system and if the capital market development is related to economic growth. This study aims to address these questions.

1.1.2 Economic Growth

According to Anyanwuocha (2008), economic growth is the process by which national income or output is increased. An economy is said to be growing if there is a sustained increase in the actual output of goods and services per head. The rate of economic growth therefore measures increase in real national income, during a given period of time, usually a year, while Economic Development is not the same as economic growth. It means more than mere growth of the economy (in terms of increased output). It is the process of increasing real per capital income and engineering substantial positive transformations in the various sectors of the economy. The positive changes which take place improve the general well-being of the people and ensure a sustained rise in the standard of living of the masses. Dare (2003), defines economic development as a process by which a high degree of self reliant economic growth in a given society, sustained over a given time is associated with substantial reduction on poverty and unemployment levels, and income inequality.

1.1.3 Effect of Capital Market Development on Economic Growth

Beckaert et al (2005), analyze that capital market development would lead to financial liberalization, which will lead to a 1% increase in annual real economic growth. Studying the link between domestic stock market development and internationalization. Laessens et al (2006), using a panel data technique concluded that domestic stock market development as well as stock market internationalization are positively influenced by the log of GDP per capita, the stock market liberalization, the capital account liberalization and the country growth opportunities and negatively influenced by the government deficit/GDP ratio. Ekundayo (2002), argues that a nation requires a

lot of local and foreign investments to attain sustainable economic growth and development. The capital market provides a means through which this is made possible.

Evidence in more advanced countries and rapidly emerging capital markets of Southeast Asia and Latin America confirm the overall positive association between capital market development and economic growth. Several benefits are ascribed to capital (securities) market development. These include; mobilization of long-term savings for long-tenured investments, providing risk capital (equity) to entrepreneurs, broadening ownership of firms, and improving the efficiency of resource allocation through competitive pricing.

According to Demirguc-Kunt and Levine (1993), further gains to the economy arise due to lower cost of equity for firms and the discipline imposed on corporate managers since movements of share prices reflect managers' performance, existence of mechanisms for appropriate pricing and hedging against risk and increased inflows of funds to the thriving domestic stock market. McKinnon (1973, 1991), Gelb (1989) and Fry (1988), Montiel (1996), among others, stress the positive contribution of capital market development to growth, while King and Levine (1993), and Ghani (1992), find strong correlation between measures of banking development and economic growth. Calamanti (1983), posits that the securities market can positively contribute to growth if supported by appropriate government policies.

Richard (1996), observes that the growth of stock markets increases the volume of long-term investments. Levine and Zeros (1996), establish a positive relationship between measures of stock market development and long-run growth rates. The stock markets are seen to provide a means for risk diversification, acquisition of information about firms, efficient allocation of funds and tying manager compensation to stock

performance. Internationally integrated capital markets make diversification of risk possible, apart from the inflow of financial resources.

In his recent study published in *The Journal of Economic Literature*, Levine (1997) reviewed a body of literature that has bearing on the debate concerning the linkage between capital market development and real sector growth. In that study, Levine discussed the linkage between four different proxies of capital market development and real sector growth.

These capital market proxies include liquid liabilities (comprising currency plus demand deposits of banking and non-banking financial institutions), bank credit as a ratio of total credit by the banking sector and the central banking sector, credit allocated to the private sector as a ratio of total credit, and credit extension to the private sector divided by GDP. Levine postulates a positive policies favoured growth of the money market rather than the capital market.

The problem of awareness is also cited as a reason for reluctance of companies to go public. This explains low supply of securities. Informational constraints relate to inadequate disclosure of information due to the underdevelopment of information technology and manpower training. Osei (1998), examines the institutional factors that affect the development of the Ghana stock market and finds that the legal and regulatory framework that ensures protection and security of investors is important. Using survey data, the study identifies such factors as low income, level of education, and information about the capital market as crucial.

1.2 Research Problem

In the early 1980s and 1990s, many Sub-Saharan Africa (SSA) countries embarked on comprehensive financial sector adjustment programs in order to mobilize financial resources for investment and growth. The financial sector reform had its primary objective the enhancement of the soundness of banking institutions in order to improve deposit mobilization and credit allocation to the private sector for investment and growth. However, recent studies have shown that the financial sector reforms did not make adequate provision for the development of capital markets in Sub-Saharan Africa (World Bank, 1994, 1990) and De Melo and Tybout, (1986).

It is argued that the focus on commercial banks has led to the neglect of non-banking financial institutions (NBFIs) that have comparative advantage in mobilizing long-term capital for investment. Those critics argue that commercial banks are not well structured to meet the long-term capital needs of the private sector for several reasons. First, commercial banks' assets and liabilities are of short-term nature, and as such, they are incapable of providing a greater supply of long-term capital to the private sector. Secondly, higher yields on short-term government Treasury bills provide greater incentives for commercial banks to hold a larger proportion of their asset portfolios in short-term government bills. This action has led to the crowding out of private enterprises, especially small and medium-sized enterprises (SMEs) from the credit market.

Thirdly, government regulation in terms of reserve requirements and the new risk-based capital requirements constrain the ability of commercial banks to provide long-term capital to the private sector. Fourth, commercial banks face real challenges of assessing the risks of borrowers properly in an informational imperfect environment and would be

averse against extending credit for business activities that are considered very risky. On the other hand, it is argued that capital market institutions such as stock exchanges can better mobilize domestic and international capital.

The existing theories indicate different kind of finance growth nexus; including the supply leading hypothesis which seeks to suggest that finance contributes to economic growth, as well as growth led finance that suggests that the economy leads and finance follows through demand driven by the economy, as well bi directional hypothesis that suggests that the effect is both ways. The empirical literature suggests that capital market development has a positive significant effect on the economy; however the literature focuses mainly on the stock market without considering the bond market. It has also been identified that various authors have addressed the issue of financial deepening with a bias to the role of the banking sector in financial deepening and economic growth.

Capital market deepening is defined as growth of stock markets and the resultant increase in the volume of long term investments (Richard, 1996). According to Applegarth (2004), capital market deepening can be determined by the ability to list more companies to the bourse as well as increased liquidity; that is the volume of active trading. Capital market deepening can therefore be said to be the ability to effectively mobilize the domestic savings for a broad array of institutions and in Kenya; this will include the ability of the Capital markets to mobilize savings for the various institutions including the equities market, bond market and money market; allocate them and provide available investment sources for the investing public.\ capital market deepening is synonymously used with capital market development by various authors including King and Levine (1993) and Dahou et al (2009).

According to Ngugi et al, (2008), capital market development offers an opportunity to investors to diversify their financial assets basket and also serves as an opportunity to diversify sourcing for finance. Investors get a chance to diversify their asset basket with a risk free asset. Capital market deepening was measured by the turnover ratio; that is Value of shares traded as a percentage of capitalization, both for equity and bond market. According to Onwumere et al (2012), turnover ratio measures liquidity of the market and high turnover ratio is an indication of low transaction cost in the stock market. A relatively small but active capital market will have low capitalization but a comparably high turnover. Turnover also complements the value traded ratio. It is important to note that previous literature apart from tackling the issue of capital market development, also address overall financial sector development since the capital markets play a role in deepening the financial sector.

The study intended to measure economic growth as the measure of growth in the Gross Domestic product of Kenya. A change in Real GDP of Kenya will be analyzed as it will indicate the effect of capital market growth. According to CMA (2012), for sustainable growth and development; funds must be effectively mobilized and allocated. The capital markets are important in allocating savings among competing uses and would thus allocate larger proportions to firms with higher prospects as indicated by risk return levels. The capital resources channelled by demand and supply forces to firms with high and increasing productivity enhancing economic growth and expansion. In the study it was important to establish what effect, if any Capital market deepening had on the economy as a whole by examining the impact on the GDP of Kenya.

The capital market deepening is the independent variable while economic growth is the dependent variable. Capital market deepening adopts five variables as explained above;

stock market turnover ratio, stock market size and bond market turnover ratio, value traded ratio and market capitalization ratio.

Studies conducted in respect to capital market deepening concentrated on stock market development and its impact on economic growth. Owiti (2012), findings indicate that there is a positive relationship between stock market development indicators and economic growth in Kenya. Kimani and Olweny (2011), findings indicate that causality between economic growth and stock market runs unilaterally/entirely in one direction from the NSE 20-share index to the GDP. Ngugi et al (2008), findings also indicate that capital market deepening plays a complementary role in the banking sector to contribute to economic growth. However Al Yousif (2002), finds bidirectional relationship between financial development and economic growth in Kenya, Chad, South Africa, Sierra Leone and Swaziland. The issue of capital market development is key since the vision 2030 secretariat identifies the Capital market as key in providing the capital necessary for achieving the social economic blueprint.

1.3 Objective of the study

The general objective of this study was to determine the relationship between capital market development and economic growth in Kenya.

1.4 Value of the study

The study will be of value to different categories of people. It will be useful to investors such as individuals, corporations and investment managers as it will highlight how their participation in the trading of Capital Market instruments affects Economic growth and by extension, their own investments. It will be useful to owners of firms in Kenya as it

will add knowledge on the understanding of how Capital Markets work and some of the benefits of participating or listing privately owned firms at the Stock Exchange.

It will benefit managers as they make strategic decisions that could include financial deepening. This study will demonstrate how such decisions would impact on the financial performance of their firms. It will also benefit academicians and researchers by providing more insight into the relationship between stock trading and the performance of the Economy. It will provide more empirical evidence on the issue which can be used to formulate or validate existing theories on the relationship.

Capital Market Authority, as the body mandated to promote, regulate and facilitate the development of Capital Markets in Kenya would find this study helpful. Development of the capital markets in the country would most certainly be affected by the deepening decisions by firms in the industry. The findings can be used by the CMA to either promote or discourage trading in the Capital Markets.

The Government will find this study very useful because trading in Capital Markets either increases economic growth or leads to economic stagnation or decline.

The study will contribute to the bulk of knowledge and research at the School of business at the University of Nairobi. It will be useful to students as a basis of reference for any future study in the field. It will also expose any knowledge gaps in this field that would give a base for further studies in the topic.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter will present a review of existing literature on Capital Market development and Economic growth. The chapter examines studies carried out in various parts of the world. As the development of Capital Markets has grown in developing economies, experts have increasingly looked at how this trend has influenced the respective countries' Economic growth.

2.2 Theoretical Review

There are several discussions about the relationship between the development of the financial system and the economic growth. The literature focuses on the financial system's components, the banking sector or the capital market, that influence economic growth. Graff (1999), stated that there are four possibilities concerning the causal relationship between financial development and economic growth:

Financial development and economic growth are not causally related. An example of this type of relation could be found in the development of modern economy in Europe in the 17th Century. In this case, the economic growth was the result of real factors, while the financial development was the result of financial institutions development.

Financial development follows economic growth. In this context, economic growth causes financial institutions to change and to develop, so as both the financial and credit market grow. Financial development is a cause of economic growth. In this case, there could be identified two possibilities, respectively: Financial development is a

precondition for economic growth; financial development actively encourages economic growth. Thornton (1995), provided that there are no real impediments to economic growth, mature financial systems can cause high and sustained rates of economic growth.

Financial development is an impediment to economic growth. Similar to the previous possibility, causality runs from financial development to real development, but the focus lies on potentially destabilizing effects of financial overtrading and crises (Stiglitz, 2002) rather than on the efficient functioning of the financial system. This view considers the financial system as inherently unstable.

The economic growth is a complex process that is influenced by more factors, other than the capital market development. Moreover, capital market development is the results of many influence factors. There are several interdependencies between these factors, which makes it difficult to establish and isolate the causal relation between the economic growth and the capital market development. According to Trew, (2006) theoretical models of finance growth nexus differ along three aspects; type of endogenous growth, the finance mechanism, and treatment of asymmetric information.

Finance Led Growth Hypothesis: The positive view of finance led growth focuses on the role played by finance in mobilizing domestic savings and investments through a more open and liberalized financial system and promoting productivity through creation of efficient capital markets. Schumpeter, (1911) is viewed to have laid the foundation for the finance led growth hypothesis. He contends that a well-functioning financial system will spur technological innovations through efficiency of resource allocation from unproductive sector to productive sector.

According to Choong, Yusop, Siong and Sen, (2004), the “finance-led growth” hypothesis postulates the supply-leading relationship between financial and economic developments. They argue that the existence of financial sector, as well-functioning financial intermediations in channelling the limited resources from surplus units to deficit units would provide efficient allocation of resources thereby leading the other economic sectors in their growth process. In their study, Choong et al (2004), conducted in Malaysia, a small emerging economy, their findings indicate that stock market development is cointegrated with economic growth they conclude that stock market development has a significant positive long run impact on economic growth. Goldsmith (1969) builds on the finance led growth hypothesis. He contends that evolution of domestic financial markets may enhance and lead to high level of capital accumulation. Ansari, (2002) analyzing impact of financial development, money and public spending on Malaysian national income argues that Malaysian experience has shown unambiguous support for the supply leading view of financial development, implying importance of financial sector development.

Fukuda and Dahalan, (2008) in a study on the finance-growth crisis on 5 Asian economies conclude that there is a positive impact of finance on growth but the finance led growth has the adverse effect of financial crisis as the substantial cost of financial deepening would lead to a crisis. Several other authors have built on the finance led growth and have conducted tests to assert the theory. Studies done by Greenwood and Smith (1996), Bencivenga, Smith, and Starr (1996) and Levine (1991), argue that stock market liquidity; the ability to trade equity easily is important for growth.

Growth Led Finance Hypothesis: Robinson (1952) challenged the finance led growth hypothesis. She argues that the relationship should start from growth to finance. She contends that a high rate of economic growth leads to a high demand and a well-developed financial sector will automatically respond to this type of demand.

According to Miles (2005), financial development follows economic development. He argues that economic growth causes financial institutions to change and develop and financial as well as credit markets to grow. In his argument financial development is demand driven and a lack of financial development is simply a manifestation of the lack of demand for financial system. Demand for financial services rises thus will be met by financial sector as the real sector of the economy grows.

Bi Directional Hypothesis between Financial Development and Economic Growth: This theory can also be referred to as the feedback hypothesis. The advocates of bi directional hypothesis argue that there is a two way relationship between financial development and economic growth. This means that financial market develops as a consequence of economic growth which in turn feeds back as a stimulant to real growth. Several studies have equally noted this type of feedback (Akinlo and Egbetunde, 2007).

Al Yousif, (2002) using time series and panel data from 30 developing economies to examine causal relationship between financial development and economic growth. He found that financial development and economic growth are mutually causal, the causality being bidirectional. Tamimi, Awad and Charif, (2001) found no clear evidence that financial development affects/is affected by economic growth while Luintel and Khan (1999) in the finance-growth nexus found bidirectional causality between financial development and economic growth in all sample countries.

According to Oya and Damar, (2006) there is no obvious relationship between financial development indicator and economic growth, neither of the two has

considerable effects on the other and the observable correlation established between them are merely results of historical peculiarity. He goes on to use granger causality test to conclude that there is bicausality between financial development and economic growth on the Turkish economy. He contends that financial development follows economic growth as economic growth causes financial institutions to change and develop and financial as well as credit markets to grow, meaning financial development is demand driven.

On the other hand, he argues that financial development is a determinant of economic growth, the line of causation running financial development to real development; services provided by financial system are base for economic growth, as financial system develops then quantity and quality of investment will be special determinant for growth. This means that financial market develops as a consequence of economic growth which in turn feeds back as a stimulant to real growth. Several studies have equally noted this type of feedback. These include Patrick (1966), Greenwood and Jovanovic (1990), Liu (2003) who reported two-way causality between financial development and economic growth; moreover, they showed that financial development impact is more pronounced in the case of developing countries than in developed countries. In their study, they used decomposition test on panel data for the period of 1960 to 1994 of 109 developing and developed countries. In this study, they tested for three different cases of causality; financial development causes economic growth, economic growth causes financial system development, and instantaneous causality between economic growth and financial system development.

Capital Market Deepening and Economic Growth: Ngugi et al, (2008) undertake a study on the impact of capital market deepening on economic growth in Kenya. They argue that when capital market develops, it offers an opportunity to investors to diversify their financial assets basket and firms to diversify their financing sources. They find a positive correlation between capital markets, financial access and depth, meaning capital markets facilitate depth of the financial sector as well as improved access to finance by investors. They find that the impact is more pronounced for stock markets than bond markets. They argue that development of capital markets has a complementary effect on the banking sector. In their model they assume financial sector development affects growth through amount of savings put in investments and technological development, similar to the findings of King and Levine (1993), therefore well-functioning markets lower costs of transactions increasing amount of savings put into investments and allowing capital to be allocated to projects yielding highest returns, resulting in economic growth.

Using regression results, their results indicate significant relationship between economic growth and capital market and bank variables but not with non-banking variables. They conclude that policy and institutional factors play a key role in development of capital markets. Similar to Dimitri, (2005) ,Ngugi et al, (2008) also emphasize on the preconditions for successful market reform program, among them; sound fiscal and monetary policy, effective legal and regulatory framework, secure and efficient settlement and custodial system, effective information disclosure and for Treasury bonds, sound and prudent debt management and a credible and stable government. Dimitri, (2005) also argues that the most important feasibility precondition is a strong and lasting commitment of authorities to maintain macro financial stability. Atje and Jovanovic (1989) on the other hand compare the impact of

the level of stock market development and bank development on subsequent economic growth and their findings indicate a large effect of stock market development as measured by the value traded divided by GDP on subsequent development, but fail to find a similar effect for bank lending.

Akinlo and Egbetunde, (2007) examine the long run and causal relationship between financial development and economic growth for 10 countries in Sub Saharan Africa. They find that financial development is cointegrated with economic growth in selected countries in the sample. Using Granger causality, he finds that financial development Granger causes economic growth in Central African Republic, Congo, Gabon, Nigeria, while economic growth Granger causes financial development in Zambia. He finds bidirectional relationship between financial development and economic growth in Kenya, Chad, South Africa, Sierra Leone and Swaziland.

Abduh, Brahim and Omar, (2012) conduct a study on the relationship between Islamic finance and economic growth; they investigate the long run and short run causality between economic growth and financial development in a dual financial system country. They use quarterly time series data of GDP,ITF (Islamic total finance), ITD (Islamic total deposits), CTL(Conventional total loans) and CTD (Conventional total deposits).Using co integration tests and vector error correction model, their findings indicate that the relationship between total financing and total deposits for both Islamic and conventional sector are positively and significantly affecting growth movement and therefore they conclude that financial deepening in the two sectors will stimulate economic growth.

Onwumere et al, (2012) conduct a study on stock market development and economic growth in Nigeria, similar to Robinson (1952), they use the demand-following hypothesis which claims that it is the growth of the economy that causes increased

demand for financial services which, in turn, leads to the development of financial markets the impact of stock market development on economic growth they use time series data from the period 1996-2010. Using Ordinary Least Square (OLS) regression, their findings indicate that economic growth has positive and non-significant impact on market capitalization ratio and turnover ratio of the Nigerian stock exchange but had a negative on the Nigerian stock market value traded ratio. Their study however falls short on testing for causation, while correlation may imply that the growth of the economy has high correlation with capital market development indicators, it does not necessarily mean that there is causation. Their study also falls short of controlling for other variables that may affect the economic growth and capital market indicators. Caporale G, Howelts A and Soliman M (2004) on the other hand examine the causal linkage between stock market development, financial development and economic growth. They argue that any previous inference that financial liberalization causes savings or investment or growth, or that financial intermediation causes growth, drawn from bi variate causality tests may be invalid, because of omitting important variables. They test for causality and emphasize the possibility of omitted variable bias. They obtain evidence from a sample of seven countries and conclude that a well-developed stock market can foster economic growth in the long run through faster capital accumulation and by turning it through better allocation of resources.

2.3 Determinants of Economic Growth

There is a large part of economic theory analyzing the causal relationship between exports and economic growth. Certainly, since exports consist one of the main determinants of economic growth, an increase of exports contributes to an increase of economic growth. However, there are also some other indirect factors, which affect the causal relationship between exports and economic growth.

Ricardo in his study in 1817, notes that trade facilitates products output with a comparative advantage in a country resulting to a higher level of national wealth. Recent empirical studies are less convincing relating to the causal relationship between exports and economic growth, because the main interest focuses on which methods are used for economic growth through trade expansion.

The basic argument is that exports expansion contributes to economic growth increasing the percentage of gross fixed capital formation and productivity factor. If there are incentives for investments growth and technology advance the marginal productivities factors are expected to be higher in exporting sector than the remaining economic ones. Since the ratio of exports to gross domestic product denotes an open economy index, a higher ratio indicates a relatively higher open economy. On the other hand a lower ratio of exports to gross domestic product reflects to a limited trade policy and a more close economy.

Solow (1956) in his study suggests that the larger the investment and saving rate are the more cumulative capital per worker is produced. Tyler (1981) examining a sample of 55 developing countries resulted that exports and investments are the main determinants of economic growth. New growth theories stress the importance of investments, human and physical capital in the long-run economic growth. The policies, which affect the level of growth and the investment efficiency determine the long-run economic growth. Theoretically, the gross capital formation affects the economic growth either increasing the physical capital stock in domestic economy directly, Plossner (1992) or promoting the technology indirectly, Levine and Renelt (1992).

Recently, many empirical studies emphasized in diversified role of private and public investments in growth process. The public investments on infrastructure, in extent in which are proved to be complementary to the private investments, can increase the marginal product of the private capital, augmenting the growth rate of a domestic economy.

Khan and Kumar (1997) supported that the effects of private and public investments on economic growth differ significantly, with private investment to be more productive than public one. Knight, Loyaza and Villanueva (1993) and Nelson and Singh (1994) confirmed that public investments on infrastructure have an important positive effect on economic growth over the period 1980-1990. Easterly and Rebelo (1993) evaluated that public investments on transportation and communications are positively correlated to economic growth, while there were negative effects of public investments of state-owned businesses on economic growth.

The effect of foreign direct investment on economic growth is dependent on the level of technological advance of a host economy, the economic stability, the state investment policy and the degree of openness. FDI inflows can affect capital formation because they are a source of financing and capital formation is one of the prime determinants of economic growth. Inward FDI may increase a host's country productivity and change its comparative advantage. If productivity growth were export biased then FDI would affect both growth and exports. A host's country institutional characteristics such as its legal system, enforcement of property rights, could influence simultaneously the extent of FDI and inflows and capital formation in that country.

Blomstoerm, Lipsey and Zejan (1994) found a unidirectional causal relationship between FDI inflows as a percentage of GDP and the growth of per capita GDP for all

developed countries over the period 1960-1985. Zhang (1999) examines the causal relationship between foreign direct investment and economic growth with Granger causality analysis for 10 Asian countries. The results of this study suggested that there is a unidirectional causality between foreign direct investment and economic growth with direction from FDI to GDP in Hong Kong, Japan, Singapore, Taiwan, a unidirectional causality between exports and economic growth with direction from economic growth to exports for Malaysia and Thailand, also there is a bilateral causal relationship between FDI and GDP for Kina and Indonesia, while there is no causality for Korea and Philippines.

Borensztein, De Gregorio and Lee (1998) highlight the role of FDI as an important vehicle of economic growth only in the case that there is a sufficient absorptive capability in the host economy. This capability is dependent on the achievement of a minimum threshold of human capital. Moudatsou, (2003) suggested that FDI inflows have a positive effect on economic growth in European Union countries both directly and indirectly through trade reinforcement over the period 1980-1996.

2.4 Empirical Review

There are at least four ways in which financial system development contributes to economic growth. They are extensively described in the surveys provided by Pagano (1993) and Levine (1997, 2002). First, financial intermediaries may lower the costs of gathering and processing information and thereby improve the allocation of resources (Boyd and Prescott, 1986).

Such information's improvement about all economic agents can boost economic growth. Besides, banks may also spur the rate of technological innovation by selecting those entrepreneurs with the greatest chances of launching successful ventures (e.g.

King and Levine, 1993). Second, Bencivenga and Smith (1993) show that banks that alleviate the corporate governance problem by lowering monitoring costs will reduce credit rationing and thereby spur growth. Third, financial intermediaries and security markets provide vehicles for trading, pooling and diversifying risk.

Thus financial systems that allow agents to hold a diversified portfolio of risky projects will induce society to shift towards projects with higher expected returns with positive incidence on economic growth [Gurley and Shaw, (1955); Greenwood and Jovanovic, (1990)]. Fourth, financial systems that encourage the mobilization of savings by providing attractive instruments and saving vehicles can profoundly affect economic development. Acemoglu and Zilibotti (1997) were very explicit. With large and indivisible projects, financial arrangements that collect resources from disparate savers to be invested in a diversified portfolio of risky projects make it easier to reallocate investment toward higher return activities with positive implications on economic growth. In summary, theory on finance and growth focuses on particular functions provided by the financial system—producing *ex ante* information, monitoring investment, exerting corporate governance, facilitating trading, diversification and risk management and pooling savings—and how these impact on economic growth through resource allocation decisions.

Empirical investigations about the relationship between financial sector development and economic growth began to appear with Goldsmith (1969). He sought to assess whether finance exerts a causal influence on growth and whether the mixture of banks and stock markets operating in an economy impacts on economic growth. Looking at decade averages for 35 countries from 1960 and 1963, Goldsmith graphically documented positive correlations between financial system development and economic growth.

Recent years investigations have given rise to a vivid interest in empirical research on the finance–growth relationship. In particular, the paper by King and Levine (1993) provided the starting point for intensified research, which received a major impetus by the IMF and World Bank data sources. An overview of the literature dealing with cross-country studies, pure time series investigations, and country case studies can be found in Theil (2001), Wachtel (2003), and Levine (2002). Instead, we will provide an overview of the evidence on panel data approaches in the finance–growth relationship and on studies dedicated to banks, stock markets and economic growth in particular.

Before presenting the evidence on the banks, stock markets and economic growth relationship, we need to briefly describe the theory dedicated to this particular aspect of the literature. In this regard, theory provides conflicting predictions about whether banks and stock markets are substitutes, complements, or whether one is more conducive to growth than the other.

Work on growth through stock markets development has been scanty. Evidence from the paper of Atje and Jovanovic (1993) that assess the impact of stock markets and a comprehensive survey is provided by Levine (2002). They find a large effect of stock markets development as measured by the value traded divided by GDP on subsequent development, but they fail to find a similar effect for bank lending.

Using a similar approach, Levine and Zervos (1998) have focused on the relationship between economic growth and financial system development using both banks and stock markets indicators. They tested this relationship for a sample of 42 countries over the period [1976–1993] using cross sectional regressions. They found that the initial level of stock markets development liquidity and the initial level of banking development are positively and significantly associated with long term economic

growth, productivity growth and capital accumulation. They also find that stock markets size, as measured by market capitalization divided by GDP, is not correlated with growth indicators. However, Harris (1997) shows that this relationship is at best weak by estimating again the same model for 49 countries over the period [1980–1991].

Conversely, Ram (1999) provides contrary evidence for both developed and developing countries that there is “. . . a negligible or negative association between financial development and growth”. Besides, the evidence from a panel of Central and East European countries (e.g. Dawson, 2003) casts further doubt on the conventional wisdom that financial development promotes growth.

In a time-series setting, Arestis et al. (2001) use quarterly data on five developed countries and find that both banks and stock markets development lead to economic growth. They also find that the impact of banking sector development is substantially larger than that of stock markets development. More recently, Thangavelu and Jiunn (2004) empirically examine the dynamic relationship between financial development and economic growth in Australia in terms of bank based and market-based financial structure. They find that financial intermediaries and financial markets have different impacts on economic growth given their diverse roles in the domestic economy.

Using VAR models, Hondroyannis et al. (2005) assess empirically the relationship between the development of the banking system and the stock markets, and economic performance for the case of Greece over the period [1986–1999]. The empirical results show that both banks and stock markets financing can promote economic growth in the long-run although their effect is small. Furthermore, the contribution of stock markets in financing economic growth appears to be substantially smaller

compared to bank finance. Van Nieuwerburgh et al. (2006) investigate the long-term relationship between financial market development and economic development in Belgium. They find strong evidence that stock markets development caused economic growth in Belgium, especially in the period between 1873 and 1914. Institutional changes affecting the stock exchange explain the time-varying nature of the link between stock markets development and economic growth.

In order to correct for the simultaneity bias, Levine (1999), and Levine et al. (2000) introduce an instrumental variable (the legal origin) that explains cross-country differences in financial development but is uncorrelated with economic growth. They find that the strong link between financial development and economic growth is not due to simultaneity bias. Rousseau and Wachtel (2000), and Beck and Levine (2004) extend the Levine and Zervos (1998) approach of stock markets, banks and growth by using panel techniques (GMM estimator). Rousseau and Wachtel (2000) use annual data and the difference estimator. Beck and Levine (2004) use data averaged over 5-year periods and the system estimator to reduce potential biases related to the difference estimator, and extend the sample through 1998. Both studies show that banking and stock markets development explain altogether subsequent growth.

In a pair of papers, Rioja and Valev (2004), take up the question of non-linearity in the finance–growth relationship using GMM dynamic panel techniques and a number of bank based financial measures. Rioja and Valev (2004) consider the effect of financial development on growth as well as the sources of growth by grouping countries according to their income per capita. Focusing on their results for the effect of financial development on economic growth, finance in low-income countries generally has a negative but insignificant impact on growth, while for the medium- and high-income countries the correlations are positive, with the largest effect

occurring in the high-income group. Rioja and Valev (2004b) divide countries based on level of financial development. For low levels of financial development, the results paint an uncertain picture, as the effect of finance on growth varies depending on the financial measure used, with results ranging from negative and insignificant to an economically large and significant positive effect.

In the same vein, Ketteni et al. (2004) study the relationship between financial development and economic growth in order to explore possible non-linearities. They use the same data set as previous researchers but employ nonparametric estimation techniques. They find that, in contrast to recent research, the finance–growth relationship is linear when account is taken of the nonlinearity between initial per capita income and human capital on the one hand, and economic growth on the other.

Christopoulos and Tsianos (2004) investigate the long-run relationship between financial depth and economic growth, trying to utilize the data in the most efficient manner via the conduction of panel unit root tests and panel co integration analysis. In addition, they use threshold co integration tests, and dynamic panel data estimation for a panel-based vector error correction model. The long run relationship is estimated using fully modified OLS. For 10 developing countries, the empirical results provide clear support for the hypothesis that there is a single equilibrium relation between financial depth, growth and ancillary variables, and that the only co integrating relation implies unidirectional causality from financial depth to growth.

Finally, Bolbol et al. (2005) study the Egypt's financial system and its relation to total factor productivity (TFP) during the period [1974–2002], which is as far as we are concerned the first published paper in the MENA region that analyses the simultaneous impact of the development of stock markets and banking sector on

economic growth. The results show that bank-based indicators have a negative effect on TFP unless they are associated with a threshold level of per capita income; whereas the effect of market-based indicators is positively reinforced by private net resource flows.

2.5 Summary of Literature Review

The financial sector is central to economic development as it serves the role of intermediary by mobilizing savings and subsequently allocating credit for productive activities. However, in many developing countries including administered interest rate, domestic credit controls, high reserve requirements, use of captive banking system to finance large budgetary requirements of the government and controls on international capital inflows have remained the main features of the monetary policy.

These repressive policies had their repercussions in the form of excess liquidity with the banking system, disintermediation of cash flows, segmentation of financial markets, underdeveloped money and capital markets, etc. [McKinnon (1973) and Shaw (1973)], therefore, argued that low interest rate ceilings unduly restrict the real flow of loanable funds, thus depressing the quantity of productive investment.

Financial liberalization, on the other hand, is defined as policy measures designed to deregulate certain operations of the financial system and transform its structure with a view to achieving a liberalized market oriented system with an appropriate regulatory framework. The financial sector reforms would lead to increase in loanable funds by attracting more household savings to bank deposits due to higher interest rates. This, in turn, would result in greater investment and faster economic growth.

In Kenya, various measures have been undertaken in the early 1990s to liberalize the financial sector as part of the overall structural adjustment programme (SAP) with the

objective to improve the effectiveness of monetary policy. These policies were implemented by making a shift from direct to indirect monetary control and greater reliance on market forces. The main financial liberalization policies were aimed at liberalizing interest rates, reducing controls on credit, enhancing competition and efficiency in the financial system, strengthening the supervisory framework, promoting growth and deepening of the financial market.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1: Introduction

This chapter describes the research design, methodology, research instruments, data collection tools, data analysis and presentation. A research methodology guides the researcher in collecting, analyzing and interpreting observed facts (Bless and Achola, 1988). Therefore this chapter illustrates how the research was carried out and provides the research design that was adopted in this study.

Kumar (2005; citing Grinnell, 1993, p.7) defines research as “a systematic, patient study and investigation in some field of knowledge, undertaken to establish facts or principals”. Cooper and Schindler (2006) define research as any systematic examination of a subject matter intended to come up with solutions for decision making that will lead to better performance of an organization.

3.2 Research Design

Correlation research design was used to identify the effect of capital market development on economic growth. Previous research done by several authors such as Levine and Zervos (1998), Mogaka (2010), Njenga (2012) also adopted correlation design, the use of a similar design enables consistency and comparability.

3.3 Research instruments and Procedures

The study focused on data from the Nairobi Securities Exchange and Kenya National Bureau of Statistics. Time series data on stock market turnover, stock market size and bond market size were obtained from period 1992-2011. The research used quarterly data on economic growth indicators as provided by The Government of Kenya through the Kenya Bureau of Statistics as well as World Bank development indicators.

3.4 Data analysis

The procedure for analyzing the data was econometric procedure. Here the technique used were the multiple regression analysis to test whether the capital market indices have impacted on the economic growth of Kenya proxy by Gross Domestic Product (GDP). Model which specifies economic growth is formulated as follows;

$$Y = F(\text{SMTR}, \text{SMS}, \text{BMTR}, \text{VTR}, \text{MCR})$$

$$Y = \alpha_0 + \alpha_1 \text{VTR} + \alpha_2 \text{SMTR} + \alpha_3 \text{MCR} + \alpha_4 \text{SMS} + \alpha_5 \text{BMTR} + \varepsilon$$

Where:

Y= Real GDP,

SMTR = Stock Market Turnover Ratio,

SMS = Stock Market Size,

BMTR= Bond Market Turnover Ratio,

GDP = Gross Domestic Product,

VTR= Value Traded Ratio,

BMTR= Bond Market Turnover Ratio,

MCR=Market Capitalization Ratio.

Market capitalization ratio equal market capitalization divided by GDP. The reason behind this measure is that the overall market size is positively correlated with the ability of the market to mobilize capital and diversify risk on economy wide basis (Levine and Zervos, 1996).

Turnover ratio measures liquidity of the market and high turnover ratio is an indication of low transaction cost in the capital market. A small but active market will have low capitalization but high turnover. The value traded ratio complements the market capitalization. It's a measure which equals the total value of bonds and shares traded divided by the Gross domestic product of the economy. This indicator of growth indicates the liquidity observed in the capital market. In this research this ratio will be used to compliment the market capitalization rate as a measure of growth of the capital market.

STATA version10 was used to analyze the data. Tests of significance included the R2 tests as well as F-statistics which tested the significance of the relationship between the five independent variables of capital market deepening and the one dependent variable of economic growth.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This section presents analysis and findings of the study as set out in the research methodology. The results were presented on the effects of capital market deepening variables on economic growth in Kenya. The study focused on data from the Nairobi Securities Exchange and Kenya National Bureau of Statistics. Time series data on stock market turnover, stock market size and bond market size were obtained from period 1992-2011. The research used quarterly data on economic growth indicators as provided by The Government of Kenya through the Kenya Bureau of Statistics as well as World Bank development indicators.

4.2 Data Analysis

The following table provides summary of data. The information is presented using the number of observations used, means and standard deviations. Data summary for research variables is presented in Table 1 below.

Table 1: Data Summary

Variable	Observations	Mean	Std. Dev	Min.	Max
Gdp	20	1166608	720453.6	262044	2738342
Vtr	20	1.253036	1.368721	.0463415	4.458667
Smtr	20	3.90593	3.269533	.4194552	13.48568
Mcr	20	.0896992	.1565195	.0028049	.4489159
Sms	20	5468.794	10333.36	52.07036	28567.99
Bmtr	20	6.870562	9.667707	0	39.86795

Source: Research Data

From the summary, there were 20 observations representing 20 years which were used for this study for all the variables. Mean scores for GDP, VTR, SMTR, MCR, SMS and BMTR were 1166608, 1.253, 3.906, 0.090, 5468.794 and 6.871 respectively. The standard deviations for the variables were 720453.6, 1.369, 3.27, 0.157, 10333.36 and 6.871 respectively.

4.3 Correlation Analysis between Capital Market Development and Economic Growth

This subsection assessed the relationship between the capital market development and economic growth in Kenya as variables under study. The variables used include GDP, VTR, SMTR, MCR, SMS and BMTR. It is important to note that at 0, there is no correlation. At 1 there is a strong positive correlation and at -1 there is a strong negative correlation. The more the value approaches 1 the stronger it becomes and the opposite is true. Table 2 below presents correlation matrix between the variables.

Table 2: Correlation Matrix

	gdp	vtr	Smtr	Mcr	sms	Bmtr
Gdp	1.0000					
Vtr	0.6755	1.0000				
Smtr	-0.1755	0.3907	1.0000			
Mcr	0.8795	0.6018	-0.4629	1.0000		
Sms	0.8935	0.5871	-0.4689	0.9974	1.0000	
Bmtr	0.0102	-0.1259	0.1611	-0.2345	-0.2251	1.0000

Source: Research Data

From the results, VTR, MCR, SMS and BMTR have a positive relationship with GDP at 0.6755, 0.8795, 0.8935 and 0.0102 respectively. The positive relationship indicates that there is a correlation between the variables and GDP with SMS having the stronger positive correlation value and BTR having a weaker positive correlation. The variables influence GDP positively. However, there is a negative relationship between GDP and SMTR at – 0.1755. This indicates that there is a negative correlation between SMTR and GDP which means according to the finding that SMTR does not influence GDP positively.

4.4 The Relationship between Capital Market Deepening and Economic Growth

In 1992 Kenya's gross domestic product (GDP) was about US\$8.2 billion. Per capita GDP averaged somewhat more than US\$441 annually. Adjusted in purchasing power parity (PPP) terms, per capita GDP in 1992 was about US\$297. The country's real GDP growth picked up to 2.3 percent in early 2004 and to nearly 6 percent in 2005 and 2006, compared with a sluggish 1.4 percent in 2003.

By 2011, the GDP had grown to US\$ 32 billion, with per capita GDP averaging US\$ 470. Real GDP is expected to continue to improve, largely because of expansions in tourism, telecommunications, transport, and construction and a recovery in agriculture. GDP composition by sector, according to 2010 estimates, was as follows: agriculture, 25.7 percent; manufacturing, 14.0 percent; trade, restaurants, and hotels, 13.8 percent; transport and communications, 6.9 percent; government services, 15.6 percent; and other, 24.0 percent. It's also worth noting the significant growth in stock market size, stock market turnover ratio, bond market turnover ratio, market turnover ratio and value traded ratio within the period under study although some of these indices show a slow down towards 2011.

A multiple regression analysis was conducted so as to test relationship among variables (independent) on GDP (dependent). The researcher used Strata, a data analysis and statistical software, to code, enter and compute the measurements of the multiple regressions for the study. The researcher assumed 95% confidence interval and 5% confidence level. Table 3 and 4 below present the raw data and regression model summary respectively.

Table 3: Raw data

YEAR	GDP PER CAPITA, US\$	REAL GDP, US\$	REAL GDP, KSH.	VTR	SMTR	MCR	SMS	BMTR
1992	441.71	8,200	297,086	0.05	1.65	0.00	52.07	-
1993	424.14	8,200	560,962.00	0.10	1.14	0.01	169.76	-
1994	412.40	5,800	262,044.00	0.53	2.25	0.02	331.79	-
1995	410.60	7,100	396,180.00	0.47	3.12	0.02	261.08	-
1996	416.46	9,000	496,350.00	0.44	4.01	0.01	236.95	-
1997	421.94	12,000	756,600.00	0.51	5.38	0.01	270.92	-
1998	412.92	13,100	809,842.00	0.35	3.55	0.01	312.26	6.38
1999	415.71	14,100	1,042,554.00	0.36	4.80	0.01	256.77	7.56
2000	414.60	12,900	1,015,617.00	0.28	3.58	0.01	244.62	6.38
2001	406.52	12,700	999,363.00	0.25	3.62	0.01	211.80	10.99
2002	411.07	13,000	1,033,890.00	0.16	2.42	0.01	202.64	39.87
2003	402.63	13,100	995,862.00	0.57	4.16	0.01	448.67	20.10
2004	403.68	14,900	1,152,431.56	1.37	7.42	0.02	679.77	17.63
2005	413.32	16,100	1,165,103.87	1.37	5.24	0.03	1,017.86	3.40
2006	426.52	18,700	1,297,718.29	3.22	9.67	0.03	1,416.13	6.90
2007	442.02	22,500	1,407,174.75	4.46	13.49	0.03	1,682.96	8.14
2008	461.02	27,360	2,126,175.70	3.58	0.80	0.45	26,641.66	0.76
2009	456.25	30,460	2,309,477.20	1.25	0.42	0.30	19,944.99	2.12
2010	456.77	30,580	2,469,393.10	3.32	0.78	0.43	28,567.99	3.61
2011	470.58	32,190	2,738,342.14	2.43	0.63	0.39	26,380.21	3.58

Source: Kenya Bureau of Statistics and research data

Table 4: Regression Model Summary

Source	ss	Df	Ms			
Model	9.3441e+12	5	1.8688e+12	No. of observations = 20		
Residual	5.1791e+11	14	3.6993e+10	F(5, 14) = 50.52		
Total	9.8620e+12	19	5.1905e+11	Prob > F = 0.0000		
				R-squared = 0.9475		
				Adj R-squared = 0.9287		
				Root MSE = 1.9e+05		
Gdp	coefficient	Std. Error	t	P> t	[95% Conf. Interval]	
Vtr	-210599	133419.1	-1.58	0.137	-496754.4	75556.4
Smtv	143005.2	49427.6	2.89	0.012	36993.56	249016.9
Mcr	-5768229	4757495	-1.21	0.245	-1.60e+07	4435582
Sms	189.7673	64.07415	2.96	0.01	52.34188	327.1926
Bmtr	12977.08	4758.568	2.73	0.016	2770.971	23283.2
Cons	262375.5	159998.3	1.64	0.123	-80786.646	605537

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (GDP) that is explained by all the five independent variables (VTR, SMTR, MCR, SMS and BMTR).

The five independent variables that were studied explain 94.75% of the gross domestic product as represented by the R – squared (R²). This indicates that other factors not studied in this research contribute 5.25% of GDP.

From the coefficient of determination, the study model or equation:

$Y = \alpha_0 + \alpha_1 VTR + \alpha_2 SMTR + \alpha_3 MCR + \alpha_4 SMS + \alpha_5 BMTR + \epsilon$, becomes:

$$Y = 262375.5 - 210599VTR + 143005.2SMTR - 5768229MCR + 189.767SMS + 12977.08BMTR$$

According to the model, when all independent variables are at zero, the dependent variable (GDP) will be Kshs. 262375.5. At 5% level of significance and 95% level of confidence, VTR had a 0.137 level of significance, SMTR had a 0.012 level of significance, MCR had a 0.245 level of significance, SMS had a 0.010 level of significance and BMTR had a 0.016 level of significance. This is seen that the most significant variable is SMS. This indicates that GDP has a significant relationship with SMTR, SMS and BMTR. It is also seen that GDP has no significant relationship with VTR and MCR.

4.5 Discussion of the Findings

The research objective that was set out was to determine the effect of Capital Market development on the economic growth of Kenya. The study adopted five independent variables for capital market deepening and one dependent variable. The independent variables that were adopted to represent Capital Market Deepening were divided into size variables and liquidity variables. According to Levine and Zervos (1998), Size and liquidity indicators are good predictors of a deep market. The size variables included; the market capitalization ratio (MCR) and stock market size (SMS) while liquidity indicators included the value traded ratio (VTR), stock market turnover ratio (SMTR) and bond market turnover ratio (BMTR). Real Gross Domestic Product (GDP) was the dependent variable adopted for the study. The study adopted time series data for 20 years.

From the correlation analysis findings the size variables, that is Stock Market Size (SMS) and Market Capitalization Ratio (MCR) have a significant positive correlation with GDP, with Stock Market Size having a correlation coefficient of 0.8935, while Market Capitalization Ratio having a coefficient of 0.8795. The liquidity variables on

the other hand also exhibit significant positive correlation with GDP with Value traded ratio (VTR) having a coefficient of 0.6755, BMTR having a very low correlation of 0.0102 while Stock Market turnover ratio having a negative correlation of -0.1755 .

The regression results indicate that 94.75 % (represented by R²) change in the dependent variable, which is GDP, could be explained by changes in the independent variables, that is Value traded ratio, Stock Market turnover ratio, Market Capitalization Ratio, Stock Market Size, and Bond Market Turnover Ratio. The Value Traded Ratio (VTR) and Market Capitalization Ratio (MCR) however have no significant effect on GDP or cannot be said to be good predictors of GDP. According to Onwumere et al (2012) the turnover ratio is an indicator of liquidity of the market and a high turnover in the stock and bond market will be taken to mean high liquidity of the market and indicator of low transaction cost and efficiency in the market.

The liquidity variables in this study were Value traded ratio(VTR), the stock market turnover ratio(SMTR), and Bond market turnover ratio(BMTR); the Stock market turnover ratio and Bond market turnover ratio have a significant positive coefficient which means they are good predictors of the GDP of Kenya, this supports the work of Osamwonyi I and Kasimu A (2013) whose findings indicate bi directional causal relationship between Stock market turnover ratio and GDP in Kenya, that is; GDP is a good predictor of the growth of the stock market turnover ratio and Stock market turnover ratio is a good predictor of GDP growth. Owiti (2012) while examining the relationship between stock market development and economy growth also finds a positive relationship between liquidity indicators and the economic growth in Kenya, her findings also lend support to the bidirectional hypothesis between market

development and the economic growth. Njenga (2012) while examining the relationship between stock market development and economic growth, using the Harrod-Domar growth model, also finds that in the short run, equity turnover had positive effect on economic growth.

The negative coefficient of the 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 1997 and 2007 the Value tradedration is affected significantly by the effects of the electioneering periods especially the 1997-1998 and 2007-2008.From the observations, the Value traded ration dropped by 0.16 percentage points from 0.51 to 0.35 in the period following the 1997-1998 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. The size variables included the Stock Market Size and the Market Capitalization Ratio. The regression results indicate the Stock market size is a good predictor of the GDP growth while the Market capitalization ratio is not a good predictor of the GDP growth since it has a negative coefficient. The stock market size is a good predictor of GDP growth however the findings of Levine and Zervos (1998) indicate that the stock market size cannot be a good predictor of GDP growth, arguing that the number of listings in

itself, which is the main component of stock market size; does not imply efficiency of the securities market, Osamwonyi I and Kasimu A (2013) finding also using listed securities find that the listed securities has a weak non-significant granger causality on economic growth in Kenya but GDP does not granger cause listed securities to increase in Kenya, however, Bekaert G and Harvey C (1997) using six market development indicators; number of stocks listed, market capitalization, total value trade, turnover ratio, market capitalization ratio, value traded ratio find a positive correlation across countries, similar to Owiti (2012). Seetanah et al (2009) using panel Vector auto regression also find positive significant relationship between Market capitalization ratio, value traded ration 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.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the finding and discussions of the study. It also covers the recommendations for further studies on related issues on the study not well covered as well as recommendations on matters of the information content of the introduction of derivatives trading. The study finally addresses the limitations of the conclusions of this study.

5.2 Summary

This study examined the impact of Kenyan capital market on economic growth and development. To achieve this, a model was formulated which we related stock market performance indicators to Gross Domestic Product. All explanatory variables were significantly joint predictors of economic growth and development in Kenya. For instance, MCAP and TNI (total new issues) are positively related and significant to GDP. This implies that an increase in market capitalization and stock will boost economic growth and development. The finding agrees with Oke and Adeusi, (2012), Pat and James, (2010), Ewah, etal (2009) and Ariyo and Adelegan (2005) who found that capital market had a positive impact on economic growth and development. But it has not contributed meaningfully to economic growth and development due to low market capitalization (MCAP), low volume of transaction, and few listed companies on the floor of Nairobi Securities Exchange.

Secondly, The negative sign of VLT(Value of transactions) and TLS (Total listed shares) indicates an inverse relationship. VLT is negatively related but not significant with GDP, while the TLS is also negatively related and significant with GDP. This finding is in line with Adetunji, (1997), cited in Chinwuba and Amos, (2011) who argues that “African markets basically lack depth and breadth with most of them trading only in traditional instruments. The level of awareness by the populace is low while not much is known about our markets by outsiders”. Also, in the views of Ilaboya and Ibrahim, (2004) “The insignificant relationship reflects the fact that majority of key investors prefer to invest in other sectors of the economy other than the capital market”.

The result showed that market capitalization, stock issues, value of stocks and total listed of equity and government bond jointly have positive significant impact on economy’s growth and development. The study conforms to the positions of Pat and James, (2010); Oke and Adewusi, (2012); Chinwuba and Amos (2011); Anyanwu, (1997); Uwubanmwen, (2001); and Osamwonyi, (2006) that capital market is a driving force for economy growth and development.

The study adopted five independent variables for capital market development and one dependent variable. The independent variables that were adopted to represent capital market development were divided into size variables and liquidity variables. According to Levine and Zervos (1998), size and liquidity indicators are good predictors of a deep market. The size variables included; the market capitalization ratio (MCR) and stock market size (SMS) while liquidity indicators included the value traded ratio (VTR), stock market turnover ratio (SMTR) and bond market

turnover ratio (BMTR). Real Gross Domestic Product (GDP) was the dependent variable adopted for the study. The study adopted time series data for 20 years.

From the correlation analysis findings the size variables, that is Stock Market Size (SMS) and Market Capitalization Ratio (MCR) have a significant positive correlation with GDP, with Stock Market Size having a correlation coefficient of 0.8935, while Market Capitalization Ratio having a coefficient of 0.8795. The liquidity variables on the other hand also exhibit significant positive correlation with GDP with Value traded ratio (VTR) having a coefficient of 0.6755, BMTR having a very low correlation of 0.0102 while Stock Market turnover ratio having a negative correlation of -0.1755 .

The regression results indicate that 94.75 % (represented by R^2) change in the dependent variable, which is GDP, could be explained by changes in the independent variables, that is Value traded ratio, Stock Market turnover ratio, Market Capitalization Ratio, Stock Market Size, and Bond Market Turnover Ratio. The Value Traded Ratio (VTR) and Market Capitalization Ratio (MCR) however have no significant effect on GDP or cannot be said to be good predictors of GDP. According to Onwumere et al (2012) the turnover ratio is an indicator of liquidity of the market and a high turnover in the stock and bond market will be taken to mean high liquidity of the market and indicator of low transaction cost and efficiency in the market. The liquidity variables in this study were Value traded ratio (VTR), the stock market turnover ratio (SMTR), and Bond market turnover ratio (BMTR); the Stock market turnover ratio and bond market turnover ratio have a significant positive coefficient which means they are good predictors of the GDP of Kenya, this supports the work of

Osamwonyi I and Kasimu A (2013) whose findings indicate bi directional causal relationship between Stock market turnover ratio and GDP in Kenya, that is; GDP is a good predictor of the growth of the stock market turnover ratio and Stock market turnover ratio is a good predictor of GDP growth. Owiti (2012) while examining the relationship between stock market development and economy growth also finds a positive relationship between liquidity indicators and the economic growth in Kenya, her findings also lend support to the bidirectional hypothesis between market development and the economic growth. Njenga (2012) while examining the relationship between stock market development and economic growth, using the Harrod-Domar growth model, also finds that in the short run, equity turnover had positive effect on economic growth.

The negative coefficient of the Value traded ration 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 1997 and 2007 the Value traded ration is affected significantly by the effects of the electioneering periods especially the 1997-1998 and 2007-2008.From the observations, the Value traded ration dropped by 0.16 percentage points from 0.51 to 0.35 in the period following the 1997-1998 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.

The size variables included the Stock Market Size and the Market Capitalization Ratio. The regression results indicate the Stock market size is a good predictor of the GDP growth while the Market capitalization ratio is not a good predictor of the GDP growth since it has a negative coefficient. The stock market size is a good predictor of GDP growth however the findings of Levine and Zervos (1998) indicate that the stock market size cannot be a good predictor of GDP growth, arguing that the number of listings in itself, which is the main component of stock market size; does not imply efficiency of the securities market, Osamwonyi I and Kasimu A (2013) finding also using listed securities find that the listed securities has a weak non-significant granger causality on economic growth in Kenya but GDP does not granger cause listed securities to increase in Kenya, however Bekaert G and Harvey C (1997) using six market development indicators; number of stocks listed, market capitalization, total value trade, turnover ratio, market capitalization ratio, value traded ratio find a positive correlation across countries, similar to Owiti (2012). Seetanah et al (2009) using panel Vector auto regression also find positive significant relationship between Market capitalization ratio, value traded ration 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.

5.3 Conclusion

The Financial Market plays an important role in promoting economic growth. By mobilizing savings for productive investment and facilitating capital inflows, it stimulates investment in both physical and human capital. The Financial Market also

channels savings to more productive uses by collecting and analyzing information about investment opportunities. Thus, by creating an efficient mechanism for transactions in long term financial instruments, it provides a wide range of wealth creating opportunities for the Government, Corporations, private individuals, and other financial institutions.

Capital market has a great impact on the development of the Kenyan economy; it promotes an efficient marketplace and provides opportunities for investment diversification. The improved delivery and settlement processes has reflected positively on the liquidity of the capital market, as well as put the Kenyan stock market on the same pedestal with some of the leading international stock exchanges. The automation of the clearing, depository and settlement system and the transition to Automated Trading System (ATS) have enhanced the opportunity for price discovery in our market and raised overall market efficiency. In the same vain, automation has made our capital market truly international and emerging market, giving the nation a strong and dynamic capital market which can be relied upon by foreign investors for efficient portfolio management. Government should therefore strive at all times to secure a stable macroeconomic and political environment based on the formulation and implementation of policies, which are consistent with the development objectives of the nations; it should pursue investor - friendly policies and ensure a level playing field for all participants.

Using correlation design the research focused on data from a 20 year period, that is 1992 to 2011, correlation analysis and regression results were used to determine the effect of the capital market deepening variables on economic growth variable, which

was real GDP of Kenya. The Capital market deepening variables were divided into size variables and liquidity variables.

From the results obtained from the multivariate regression, three out of five variables for capital market deepening have a significant positive relation with GDP it can therefore be concluded that indeed capital market deepening has a significant positive effect on economic growth in Kenya. The results are consistent with previous research conducted by Owiti (2012), Levine and Zervos (1998), Osamwonyi I and Kasimu A (2013), Bekaert G and Harvey C (1997) on the stock market deepening variables and economic growth.

The research further lends support to the finance-growth nexus which suggest the positive role played by finance in mobilizing savings and investments through creation of efficient capital markets. The supply leading relationship between finance and growth was first advocated by Schumpeter (1911) in which he suggests that a well-functioning financial system will stimulate economic growth. The study however fails to find a bidirectional relationship between economic growth and finance in Kenya as suggested by some researchers including Owiti (2012) and Osamwonyi I and Kasimu A (2013). In conclusion it can be said that a deep market will act as a spur to economic growth in Kenya. It is important to note that previous research only focused on the stock market deepening on growth, without considering the effect of the bond market in contribution to growth.

Given that in Kenya, more individual and institutional investors are investing in the bond market and the specific role of the bond market in providing the capital

necessary for long term infrastructure projects, the study also included a proxy for bond market. The bond market turnover ratio was found to have a significant positive relationship with the economic growth, suggesting that the bond market is essential contributor to economic growth in Kenya and important for providing financing for key infrastructure projects necessary for Kenya to attain Vision 2030.

5.4 Recommendations for Policy

Given the significant contribution of the capital market in the growth of the economy, the government should improve dealing in the market capitalization by encouraging more foreign investors to participate in the market, provide tax incentives to investors in order to facilitate more investors' to pool their savings in form of capital market instruments such as stocks, bonds and treasury bills. For example, reducing the tax charged on bond interest income, double taxation relief. There is also need to check and regulate the operators and all activities of the market through code of conduct of the market.

The government should also improve basic infrastructures such as communication and information network. This will enhance transactions between parties of the market (issuing house, stock brokers, investors etc) and thus ensure further development of the capital markets.

The government should also discourage Kenyan investors' attitude of buy and hold securities instead of trading in the capital market. The government should also provide incentives to Small and Medium Enterprises in order for them to list on the capital market. The recent launch of the Growth Enterprises Market Segment (GEMS)

was a step forward in terms of bringing in more companies to list in the stock market but the requirements are still stringent especially for startups, more should be done in order to encourage startup companies to raise capital in the capital market.

There is also need to increase investments instruments such as derivative instruments commodity futures, swaps, swapoptions, options and have the necessary regulatory framework to facilitate supervision. The government should fast track the implementation of reform program to enable the growth of the capital market and especially so; the bond market.

The government should also restore confidence to the market through regulatory authorities such as the C.M.A being empowered in its oversight capacity so as to portray transparency, fair trading transactions and dealing in the stock exchange to protect investors and instill confidence in the capital market since some stock brokerage firms such as Francis Thuo and partners, Discount securities collapsed running the reputation of the investors on the capital market.

The government should raise more money through treasury bills and bonds since it has a direct effect on the economic growth. This will have a double effect of influencing economic growth and also reducing inflation that would otherwise be caused by excess money in the hands of individuals in the economy.

5.5 Limitations of the Study

The study adopted time series data for a 20 year period from 1992-2011 using single country evidence because of limited resources to conduct cross country evidence.

According to Onumwere (2008) cross country evidence is essential for time series data in order to eliminate country specific variants and enhance validity of the findings. The study failed to control for other factors that may have been taking place contemporaneously and that may have influenced the real economic growth.

The study used data for 20 year period which can be considered to be relatively small in order to make inference on studying the variables, this is a limitation that may affect the validity of the research, and however this was necessitated by the limited existence of the data prior to Capital Markets Authority enactment in 1990.

While new financial products based on new financial technology are continuously created, there are a few cases where the tax and accounting treatment of such products is not necessarily clear. In fact, market players often say that they have been refraining from engaging in new kinds of transactions because the tax and accounting treatment is not clear. If tax and accounting treatment is not clear, including actual application, the evaluation of risks of individual products becomes difficult and its overall effect on the development of capital markets and subsequent impact on the economy is hard to establish.

The rapid progress in calculation techniques by computers has enabled a massive amount of statistical data to be handled instantaneously. For example, calculations to obtain default probability and various risks, which are critical when dealing with financial products, are now done in a very short period of time. In addition, due to the progress in telecommunication technology, including the Internet, massive data collection has made it easier to come up with models and scenarios as is done in the

developed countries. The researcher had limited access to such resources due to their unavailability and/cost implications.

Time was a limiting factor for the researcher since he is in full time employment and therefore did not have adequate time especially in the collection of data. Further, data from NSE was insufficient to be used to answer the research objectives sufficiently. In addition, limited resources on the part of the researcher were another limitation. The research lacked adequate funding for conducting the research.

5.6 Recommendations for Further Research

A critical component of capital market is derivatives which are a new concept in Kenya; the issue of viability of the derivatives to contribute to capital market development and deepening is also an area of further research. Majority of the research on empirical capital markets and growth emphasize on the finance growth nexus where finance is found to contribute to growth through the supply leading hypothesis suggested by Schumpeter (1911), there have however been little empirical research to test the demand following hypothesis as suggested by Robinson (1952) that suggests that growth precedes finance, it is therefore an area that requires more exploration.

Very little empirical finance literature exists on bond market deepening in Kenya and therefore the area of bond market deepening can be explored further given its critical importance in the economy of Kenya. It would help if more in depth research was conducted with regards to the bond market, its growth and impact, if any, on the economic development of Kenya.

It would be desirable to see banks and capital markets develop together by being closely connected and influencing each other, and supporting Kenya's economy from the financial front. The roles of capital markets have increasingly gained significance as banks have strengthened management style. Since banks are currently saddled with non-performing loans, NPLs, the role of capital markets has become especially important and this would be an interesting area of research to see how they can compliment each other.

In order to ensure smooth corporate financing, firms need to devise ways from various angles. One such angle is utilization of the capital market. As previously mentioned, banks and capital markets are complementary, and capital markets are expected to substitute for the role of banks in the event banks are faced with problems. In fact, in addition to direct funding measures such as corporate debentures and CP, recent developments in financial technology have facilitated the securitization and liquidation of loan assets into forms in line with investor needs. This is also an area that requires further research for local adoption as its already happening in the west.

From the work done further research can be considered on whether derivative trading can lead to companies listed at the NSE manage risks and reduce costs. The researcher thus recommends a study on whether derivatives can bring about any turnaround in the capital markets operations, creating opportunities to the participants to realize optimal reward from their investments and to manage the associated risk effectively.

REFERENCES

- Abduh M., Brahim S. & Omar M, A. (2012). *Study on the finance-growth nexus in dual financial system countries: Evidence from Bahrain*, World Applied Sciences Journal 20(8); 1166-1174.
- Akinlo A. & Egbetunde, (2010). *Financial development and economic growth; the experience of 10 Sub Saharan African countries revisited*. The review of Finance and banking, 2(1), 17-28.
- Atje, R. & Jovanovic, B. (1993). *Stock markets and development*. *European Economic Review* 37, 632-640.
- Anyanwuocha R.A.I. (Ed) (2008). *Fundamentals of Economics*. Onisha: Africana First Publishers Limited.
- Arestis, P., Demetriades, P. & Luintel, K. (2001) *Financial Development and Economic Growth: The Role of Stock Markets*, Journal of Money, Credit and Banking, 33,16-41.
- Applegarth, P. (2004). *Financial sector development in Sub Saharan Africa*. Center for strategic & International studies.
- Beckaert, G., Harvey, C. & Lundblad, C. (2005). *Does financial liberalization spur growth?* Journal of Financial Economics, 77, 3-55.
- Beckaert G. & Harvey C, (1997). *Capital markets: An engine for economic growth*, National Bureau of economic research, Cambridge.
- Beckaert, G., Harvey, C. & Lundblad, C. (2005) *Does financial liberalization spur growth?* Journal of Financial Economics, 77, 3-55.
- Bencivenga, V.R., Smith, B. & Starr, R. M. (1996). *Equity Markets, Transaction Costs, and Capital Accumulation: An Illustration*. The World Bank Economic Review,10, 241-65.

- Bolbol, A., Fatheldin, A. & Omran, M. (2005) *Financial development, structure, and economic growth: the case of Egypt, 1974-2002*, Research in International Business and Finance, 19,171-194.
- Caporale, G.M., Howells, P.G.A. & Soliman, A.M. (2004). “*Stock Market Development and Economic Growth: The Causal Linkages*” Journal of Economic Development, 29, 33-50.
- Capital Markets Authority, (2011). Annual report and financial statements for the year 2011.
- Capital Markets Authority (2012), Impact of Capital markets incentives, Nairobi.
- Capital Markets Authority (2013), An outlook of capital markets in Kenya, Nairobi.
- Christopoulos, D.R. & Tsianos, E.G. (2004). *Financial development and economic growth: evidence from panel unit root and cointegration test*. J. Dev. Econ. 73, 55–74.
- Claessens, S. Klingebiel, D. & Schmukler, S. (2006) *Stock market development and internationalization: Do economic fundamentals spur both similarly?* Journal of Empirical Finance, 13, 316-350
- Dahue L. Oke, M.O and Adeusi, S.O (2012). *Impact of Capital Market Reforms on Economic Growth: The Nigerian experience*. Australian Journal of Business and Management Research, 29, 31-43.
- Dare A. (2003). *Principles of Economics (MACRO)*. Isheri-Osun, Lagos: Darkol Press and Publishers.
- Dawson, R.J. (2003). *Financial development and growth in economies in transition*. Appl. Econ. Lett. 10, 833–836.
- Demirgüç-Kunt, A. & Levine, R. (1996). *Stock market development and financial intermediaries: stylized facts*. World Bank Econ. Rev. 19, 291–322.
- Demirgüç-Kunt A. & Levin R. (1996). *Stock Market, Corporate Finance and Economic Growth: An Overview*. The World Bank Review, 10(2) ,223-239.

- Demirgüç-Kunt, A. & Levine, R. (1996). *Stock Market Development and Financial Intermediaries: Stylized Facts.* "The World Bank Economic Review, 10, 291-321.
- Dimitri, V. (2005). *Pension reform and capital market development; feasibility and impact preconditions, policy and research department.* The World Bank economics, 22(1) , 3-42.
- Easterly, W. & Rebelo, S. (1993). *Fiscal policy and economic growth.* J. Monet. Econ. 32, 417–458.
- Ekundayo, I.K. (2002). *Creating Conducive Environment for Investment in Nigerian Capital Market. Paper Presented at Public Enlightenment on opportunities in the Capital Market for Industrial Development of Kogi State “ Lokoja 29th March to 1st April, 2002.*
- Fukuda M. & Dahalan L. (2008). *Capital Market imperfection and Community Economic Development.* Nigerian Academy of Management Journal 10, 38-43.
- Garcia, F. V. & Liu L. (1999). *Macroeconomic Determinants of Stock Market Development.* Journal of Applied Economics, 2 (1), 29–59.
- Goldsmith, R. W. (1969). *Financial Structure and Development.* Yale University Press New Haven, Conn.
- Government of Kenya, (1987). *Sessional paper No.1 of 1986 on economic management for renewed growth.* Nairobi.
- Government of Kenya, (1989). *Capital Markets Authority Act, Cap 485 a, Laws of Kenya,* Nairobi.
- Government of Kenya, (2008). *Draft sector plan-financial services; 2008-2012,* Nairobi.
- Graff, M. A. (1999). *Financial Development and Economic Growth - A New Empirical Analysis,* Dresden Discussion Papers in Economics No. 5
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=258928, accessed 19 July 2007.

- Greenwood, J. & Jovanovic, B. (1990). *Financial development, growth and the distribution of income*. J. Polit. Econ. 98,1076–1107.
- Harris, R.D.F., (1997). *Stock markets and development: a re-assessment*. Eur. Econ. Rev. 41, 139–146.
- Hondroyannis, G., Lolos, S. & Papapetrou, E. (2005). *Financial market and economic growth in Greece, 1986-1999*, Journal of International Financial Markets, Institutions and Money, 15, 173-188.
- Kimani, D. & Olweny, T. (2011). *Stock market performance and economic growth, empirical evidence from Kenya using causality test approach*, Advances in Management and Applied economics Journal, 1(3), Kenya.
- Ketteni, E., Mamuneas, T., Savvides, A. & Sterigos, T., (2004). *Financial development and economic growth: is the finance–growth relationship non-linear?* Manuscript, Department of Economics, University of Cyprus.
- King, R. G. & Levine, R. (1993). *Finance and Growth: Schumpeter Might Be Right?* The Quarterly Journal of Economics, MIT Press, 108 (3), 717-737.
- King, R. G. & Levine, R., (1993). “*Finance and Growth: Schumpeter Might Be Right*” Quarterly Journal of Economics, 108, 717-738.
- King, R. G. & Levine, R., (1993). “*Finance, Entrepreneurship, and Growth: Theory and Evidence*”, Journal of Monetary Economics, 32, pp. 513-542.
- Kumar R, (2005). *Research Methodology: A step by step guide for beginners*, Sage publications Inc., New Delhi, India.
- Levine, R. (1996). *Financial Development and Economic Growth: Views and Agenda*, Journal of Economic Literature, 35, 1997, pp. 688-726.
- Levine, R. & Zervos, S. (1998). *Stock Markets, Banks, and Economic Growth*, American Economic Review, 88, pp. 537-558.

- Levine, R., (1991). *Stock markets, growth and tax policy*. J. Finance 46, 1445–1465.
- Levine, R., (1997). *Financial development and economic growth: views and agenda*. J. Econ. Lit. 35, 688–726.
- Levine, R., (1999). *Law, finance, and economic growth*. J. Financ. Intermed. 8, 36–67.
- Levine, R., (2002). *Bank-based or market-based financial systems: which is better?* J. Financ. Intermed. 11, 398–428.
- Levine, R. & Zervos, S., (1998). *Stock markets, banks and economic growth*. Am. Econ. Rev. 88, 537–558.
- Levine, R., Loayza, N. & Beck, T., (2000). *Financial intermediation and growth: causality and causes*. J. Monet. Econ. 46, 31–77.
- Levine R. & Zervos S. (1998). *Stock Markets, Banks, and Economic Growth*, American Economic Review, Vol. 88, pp. 536–558.
- Liu, W. & Hsu, C. (2006). *The role of financial development in economic growth: The experiences of Taiwan, Korea, and Japan*. Journal of Asian Economics, 17, 667–690.
- Levine, R. & Zervos, S. (1998). *Stock Markets, Banks and economic growth*, The American economic review, 8, 537-558.
- Levine, R. & Zervos, S. (1996). *Stock development and long run growth*, Policy research department publication, The World Bank.
- Levine, R. (1996). *Financial Development and Economic Growth: Views and Agenda*. Journal of Economic Literature.
- McKinnon, R. I. (1973). *Money and Capital in Economic Development*. Washington, DC: Brookings Institution.
- Mugenda, O. M. & Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. African Centre for Technology Studies (ACTS).

- Ngugi, R. (2003). *Development of the Nairobi Stock exchange: A historical perspective*.
Kenya Institute of public policy research discussion paper no.27.
- Ngugi, R., Amanja, D. & Maana, I.(2009). *Capital market, financial deepening and economic growth in Kenya*. available at: www.csae.ox.ac.ukconference
- Onwumere, J., Jolley, S. & Craig, T.(2012). *Money and Capital Markets in Nigeria Today*,
University of Lagos Press Nigeria.
- Owiti, J. (2012). *Stock market development and economic growth in Kenya*, University of
Nairobi, Kenya.
- Patrick, J. (1996). *Financial development and economic growth in underdeveloped countries*.
Economic development and cultural change research, 14(2), (1996), 174-189.
- Ram, R. (1999) “*Financial Development and Economic Growth: Additional Evidence*” The
Journal of Development Studies 35, 164-174.
- Robinson, J. (1952) “*The Rate of Interest and Other Essays*” Macmillan, London
Schumpeter.
- Richards, K. (1996). *Volatility and predictability in National Stock Markets: How do
emerging and mature markets differ?* IMF Staff Papers, 43(3), 461-501.
- Rioja, F. & Valev, N. (2004). *Does one size fit all? A re-examination of finance and growth
relationship*. J. Dev. Econ. 74, 429–447.
- Rioja, F. & Valev, N. (2004). *Finance and the sources of growth at various stages of
economic development*. Econ. Inq. 42, 27–40.
- Rousseau, P. L. & Sylla, R. (2001). *Financial Systems, Economic Growth, and Globalization*,
Working paper 8323.
- Stiglitz, J. (2002). *Globalization and its Discontents*, New York, WW Norton Company.
- Stiglitz, J. (1985). “Credit Markets and the Control of Capital.” Journal of Money, Credit and
Banking.

- Thornton, J. (1995). Financial Deepening and Economic Growth in Developing Countries, *Economia Internazionale*, 48(3), 1995, 423-430
- Theil, M. (2001). *Finance and economic growth: a review of theory and the available evidence*. European Commission Economic Paper No. 158.
- Trew, A. (2006). *Finance and Growth: A Critical Survey*. *Economic Record*, 82: 481–490.
- Van Nieuwerburgh, S., Buelens, F. & Cuyvers, L. (2006). *Stock market development and economic growth in Belgium*. *Explor. Econ. Hist.* 43, 13–38.
- Wachtel, P. (2003). *How much do we really know about growth and finance?* *Econ. Rev.* 88, 33–48.
- Yartey, C.A. & Adjasi, K. (2007). . IMF Working Paper WP/07/209.