

**FACTORS AFFECTING THE DEVELOPMENT OF EMERGING CAPITAL
MARKETS. THE CASE OF NAIROBI STOCK EXCHANGE**

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DECLARATION

This Research Project is my original work and has not been submitted for a degree in any other University.

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This Research project has been forwarded for examination with my approval as university supervisor.

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DEDICATION

I dedicate this work to my wife Nancy and my children for their love, encouragement, understanding and support throughout my studies.

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My special thanks go to my Supervisor, Winnie Nyamute for her support and significant contribution that have enriched the results of this study. Her vast knowledge of the discipline of finance, her uncompromising stance on quality and the details served to enrich the quality, scope and contents of this study and without her invaluable contribution the completion of this study would not have been possible.

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ABSTRACT

This study examines the factors affecting the development of emerging capital markets- the case of Nairobi Stock Exchange. The study covered the period 2005-2010 on all listed companies in NSE. However, despite various measures instituted by the government at different times, performance indicators show a relative poor performance of the NSE compared to other emerging stock markets. These include: low turnover ratio, low market capitalization to GDP ratio and low value of stock traded to GDP ratio. This study was therefore designed to identify factors affecting the development of emerging stock markets-The case of Nairobi Stock Exchange.

A case study design was used at finding out the factors affecting the development of an emerging Capital market. However, descriptive and regression approach was used in data analysis and secondary data collection method was used. The study establishes both the external (macro economic and social cultural factors) and market (legal, regulatory and Institutional) factors which have constrained the development of the Stock Market. However, there are some variables which didn't clearly show the above relationship, namely macroeconomic stability-inflation and private capital inflows. It can therefore be concluded that stock market development is determined by stock market liquidity, institutional quality, income per capita, domestic savings and bank development.

Using the regression analysis, the study established that 85% of stock market development is determined by: stock market liquidity, institutional quality, income per capita, macroeconomic stability-inflation, domestic savings and private capital flows and bank development. The study recommends NSE needs to be developed further to enhance domestic resource mobilization. Various policies and programs that affect stock market development such as regulation of institutional investor and privatization need to be addressed. The policy makers should consider reducing impediments to stock market development by easing restrictions on international capital flows. NSE should play an increasingly educational role and CMA should also change its approach from heavy handed type to more productive.

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LIST OF ABBREVIATIONS

AIMS	-	Alternative Investment Market Segment
CDS	-	Central Depository System
CMA	-	Capital Market Authority
GDP	-	Gross Domestic Product
IFC	-	International Finance Corporation
MIMIS	-	Main Investment Market Segment
NSE	-	Nairobi Stock Exchange
ADB	-	African Development Bank
SPSS	-	Statistical package for social sciences
FDI	-	Foreign Direct Investments
ICRG	-	International Country Risk Guide

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Emerging capital markets are financial markets that reside in the low or middle income economies or where the ratio of investable market capitalization to group to Gross National Product is low. Such parameters to classify the financial market are set by international finance corporation. Generally there is no definition of emerging capital market. The international Finance corporation (IFC) defines an emerging market as one in which is found in developing country (IFC, 1994). Barry and Lockwood (1995) observed that the above definition by the IFC is that a developing country is where a- per capital Gross National Product (GNP) of not more that US \$8,356. The economies of many developing countries have been characterized by declining commodity prices, disequilibrium in the balance of payments, reduced foreign aid and declining economic growth. Thus inflow of foreign investment is crucial in their efforts to restore macro-economic stability (Killick and Martin,1990).

New theoretical research work show that capital market development might boost economic growth and empirical evidence tends to provide some support to this question Levine and Zervos (1998), for instance, find that stock market development plays an important role in predicting future economic growth. Seyyed et al (2010) in the study of the relationship of capital market development and economic growth in Iran, they examined the relationship between stock prices and economic growth by conducting tests for all time series, data findings were that there was a link between economic growth and stock price fluctuation and in conclusion it was found that the level of real economic activity is the main factor in the movement of the stock prices in the long run and capital market plays as leading economic indicator of future economic growth.

Torre and Schmukler (2003), observes that capital markets in many emerging economies looks particularly poor when considering the many efforts already undertaken to improve

macro-economic environment and reform the institutions believed to foster financial development. This disappointing performance has made the conventional policy recommendations for capital market development questionable at best. Policy makers are left without clear guidance on how to revise the reform agenda and a bright future for domestic capital markets particularly for local stock markets or smaller emerging economies. The failure to develop deep and efficient capital markets may have important consequences; growing empirical evidence suggests that financial is not just correlated with a healthy economy; it actually causes economic growth and has positive impact on poverty alleviation and income distribution as well. Therefore a better understanding of the drivers of capital market development and the reasons for perceived failure of reform effects in many emerging economies can provide a useful guidance to policy makers.

It is widely recognized that a well organized capital market is crucial for mobilizing both domestic and international capital. In principle, capital markets are expected to accelerate economic growth by providing a boost to domestic savings and increasing the quantity and quality of investment. In particular, capital markets encourage economic growth by providing an avenue for growing companies to raise various capitals at lower cost (Singh, 1997).

Daillami and Atkin (1990) describe the provision of funds to finance domestic capital formation as a key factor in the prospect for the long term economic growth in developing countries. The author observe that the reality of a much reduced supply of foreign funds from previous sources such as commercial banks, compels government in many developing countries to pay increased attention to capital market development as a way of improving domestic resource mobilization, enhancing the supply of long term capital and encouraging the efficient use of existing assets.

A typical capital market comprise of the following institutions: Banks, insurance companies, Mutual funds, mortgage funds, finance companies and stock markets. A stock market is a financial institution where securities are bought and sold. As Pardy (1992) observes security markets have an important role to play in financial liberalization and

deepening. The Authors contends that apart from providing a means of diversification risk for both capital raisers and investors, securities markets could play other roles. For example they are a mechanism for capital allocation and corporate monitoring and a means for government to exercise market -based rather than direct fiscal and monitoring policies. Demirguc- Kunt (1992) observes that in the poorest developing countries, firms rely mostly on internal resources and informal credit markets for financing.

Engberg (1975) recognizes the need for capital market even for less developed economies. He contends that capital market can significantly raise the level of domestic savings and contribute to more efficient allocation among competing users. The author emphasizes that through capital market, a variety of financial assets, carrying different risks, yields and liquidity is added to the traditional types of financial assets such as demand and savings deposits. He further observed that the availability of this wider range of financial assets will induce people to increase their rate of current savings. The reason is that the capital market enables savers to achieve a better wealth composition and also permits adjustments to be made in the wealth composition with speed and at low cost whenever circumstances change. Moreover, competition among the users of the capital market funds including business, government and individuals, will tend to increase the efficiency with which capital is used with direct effect on the growth rate of the economy.

The development of African stock exchanges is growing in importance because of the important role they play in facilitating higher savings rate of the working population, offering of variety of securities to as many people as possible, flow of foreign direct investment into long established or recently introduced companies distribution on capital in the most productive sectors of the economy redistribution of wealth in the economy and improved corporate governance through increased transparency.

The stock market plays significant role in any economy, according to Stijn (1995) and Munga (1974) a stock market acts as a vehicle for raising capital for firms and it takes on a large role in developing countries, where privatization of state corporations is taking

place. Most companies and governments of the developing countries have turned to the stock market as an Avenue raising capital to finance various projects.

Secondly African stock exchange promotes high standards of accounting, resource management and transparency in the management of business. This is due to the fact that people who have money may not necessarily have the best business ideas and vice versa. This the stock market becomes an important risk between the two groups (NSE 2000)

Thirdly the stock market performs a screening and monitoring role. In addition, through continuous adjustments of stock prices, the stock market assists in monitoring management of publicly traded corporations thereby improving corporate governance (Stijn, 1993) Levine and Zervos (1996) argue that efficient stock market help mitigate the principal agency problem. Furthermore Laffont and Tirole (1998) and Scuartstein (1988) though that take over threats induce managers to maximize a firm's equity prize.

In addition, capital markets facilitate the mobilization and allocation of medium and long – term funds for productive investment by providing a simple mechanism for the transfer of funds; facilitating companies access to a large number of local and foreign investor, widening the array of financial instrument available to savers and investors increasing the diversity and competition in the financial systems and providing market signals on current situations and future expectations. It also been observed that stock markets (Emerging) have the potential to help to wealth and long term capital needed for development thereby facilitating poverty reduction and the improvement of living standards (Okereke- Onyuke 2003). It has been stated that the future of Africa's stock markets is the future of the poor in Africa (Brown , 2003).

The jobs, businesses, prosperity and the future of the region lie in the stock's markets ability to mobilize capital for economic development and growth . The securities exchange can be a powerful tool, for growing indigenous capital that will attract international capital if they are well designed and set up, properly regulated and

supported by appropriate government policies (Sheehan and Zamala 2002). Clearly then, capital market development is central to economic growth (development) of any country. Demirguc and Levine (1996) put forward various performance indicators that can be used to gauge the level of development of a capital market. These are: market capitalization as a proportion of Gross Domestic Product (GDP), value of stock traded as proportion of GDP, turnover ratio, number of listed companies, market concentration, volatility of stock returns, degree of integration between national and the world markets.

In Kenya, the capital market has not played its role in capital mobilization, though if properly organized it could be a source of much needed capital necessary for, economic growth (Wagacha 2001). Additional supply of capital is urgently required to maintain the momentum of the growth in GDP. Also in Kenya, an organized capital market can serve as a medium for transferring part of the business ownership of foreign corporations to the citizens. Central to the efficient functioning of a capital market is the development of the stock market. The emerging capital markets of Southeast Asia move successfully used the stock market to mobilize savings and channeled such savings to appropriate investment (IFC emerging market Data base 1990).

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 capital market development with special emphasis on the institutional development of the stock market and the introduction of new instruments in the bonds market. Long term capital is teemed.

1.1.1 The Nairobi Stock Exchange

The NSE was incorporated under companies act of Kenya 1991 as a company limited by guarantee and without a share capital (NSE, MA AND AA 1991). C.M.A AND 1991) The NSE is an example of an emerging stock market that has been characterized by humble beginnings yet has grown considerably over time. It stands out as an average stock

market with great potential for growth. It accounts for over 90% of market activity in the Eastern African region and is a referral point in terms of setting standards for the other markets in the region (World Bank). However, as an emerging capital market it has faced challenges to its development and growth such as economic depression and political uncertainty among others.

In 1994 the NSE was rated by the International Finance Corporation (IFC) as the best performing emerging market in the world with a return of 179% in dollar terms (Odundo 2004). Before independence in 1963, there were about 10 listed companies at the NSE, the period 1970's saw about twenty more listed companies and since 2000 there were fifty four listed companies. The slow at which companies are listed is a concern and needs to be investigated (listed companies 2005). NSE is today poised to play an increasingly important role in the Kenyan economy especially in the privatization of state evolved enterprises. NSE facilitates the mobilization of capital for development and provides savers in Kenya with an alternative saving tool. Funds that would otherwise have been consumed or deposited in bank accounts are redirected to promote growth in various sectors of the economy as people invest in securities. NSE can also be used by the government and local authorities as an alternative source of funds to increasing taxes in order to finance development projects. NSE is used as an instrument of privatization and also as an avenue of liberalization of sectors previously dominated by the government.

1.2 Statement of the Problem

Kibuthu (2005) in studying capital markets in emerging economies observed that prior to the late 1980's, international donors and governments in developing countries held the notion that entrepreneurial functions could be served better by the state through state ownership of the means of production, taxation, licensing and regulation. Poor performance of the public sector, misallocation of resources, market distortion and negative economic growth influence a re-evaluation of the state-led development strategy. In the past 15 years, liberalization and privatization have become dominant themes in development strategies particularly in Africa. Donors, governments and

development practitioners have exhibited changing attitudes towards the role of the private sector in the development of African economies and acknowledged the need to facilitate private sector development.

Promotion of economic growth led by the private sectors requires an enabling environment which the private sector can flourish. A key factor is the healthy growth of a nation's financial sector, which in turn improves the private sectors' access to services such as bank credit, equity capital, payments and risk management services (The World Bank 2002, paper 14). Odundo (2004), while examining the overview and evolution of investments in sub-Saharan Africa with special reference to Kenya, observed that financial markets typically comprise of several institutions including banks, insurance, mortgage funds, finance companies and stock markets. It was also observed that, in developing countries, financial markets are dominated by commercial banks, which have not been reliable sources of long-term financing. The non-bank sources of medium and long term are generally underdeveloped. Heavy reliance on banks increases vulnerability of financial systems as exemplified by the Asian financial crisis in the 1990s'.

Demirguc and Levine(1996),Singh(1997) and Levine and Zervos(1998) find that stock market growth plays an important role in predicting future economic growth in cases where the stock markets are active. Considering the above arguments by Demirguc et al.(1996) shows that economies without well-functioning stock markets may suffer from; limited risk diversification; lack of information about the prospect firms whose shares are traded. This has led to the development of programs by World Bank, IMF and ADB for the development of the emerging capital markets in developing countries.

In a study by Morland (1995) he observed that despite the positive and encouraging development in the restructuring of African financial systems, stock market development in Africa is grossly incomplete. With exception of South Africa the emerging stock market in Africa are by far the smallest of any region, both in terms of numbers of listed companies and market capitalization. Only four companies were trading in Swaziland in 1995, twelve in Botswana, fifty six in Kenya and one hundred eighty one in Nigeria

compared to over seven thousand in the U.S. Moreover the listed companies consist mostly of foreign firms a reflection of the weak, private system in these countries. In absolute term market capitalization as of December 1995 ranged from Usd 189 million in Namibia, Usd 397 million in Botswana, Usd1676 million in Kenya, and Usd2033 in Nigeria and Usd2038 in Zimbabwe.

Kenya's capital market has come a long way since the country's independence in 1963. The capital market now comprises of; the trading debt and equity over the Nairobi Stock Exchange (NSE); debt capital markets (bonds); development financial institutions (DFI's) and pension funds. The financial sector plays a crucial role in financial sector development and the realization of value. In particular, the market assists in price discovery, liquidity provision and proper allocation of risk between various participants. On a more macro-economic level, the capital market is positively correlated to a country's economic growth.

Notwithstanding the above, Kenya's capital market is faced with challenges. The financial sector is inordinately skewed towards banking institutions that are yet to provide long-term capital on an adequate basis. Furthermore equity and debt markets are struggling to gain momentum, partly due to the fact that only 56 companies are listed on NSE, with only a small proportion of shares attracting significant trading volumes. The experience of the recent Kengen and Safaricom LPO's which were well oversubscribed by Kenyan savers and institutions serves as a clear indication that there is appetite amongst Kenyan market participants for a more diversified financial asset risk (Mara 2009). The government of Kenya, in realizing the importance of the stock market, instituted various measures including the establishment of a regulatory body called Capital Market Authority (CMA) in the late 1980s. However, despite various measures instituted by the government at different times, performance indicators show a relative poor performance of the NSE compared to other emerging stock markets. These include: low turnover ratio, low market capitalization to GDP ratio and low value of stock traded to GDP ratio (IFC, 2000). However, as foreign aid to Kenya is declining, the stock market has become an important avenue for accessing and competing for foreign funds (G.O.K 1994).

In the light of these developments, it is necessary to identify and analyze all the factors that limit the development of the capital market in emerging markets (Kenya) and to suggest necessary policy recommendation. Thus this study sought to answer the question; what are the factors affecting the development of an emerging Capital market?

1.3 Objective of the Study

The main objective of the study is to determine the factors that affect the development of emerging capital market -The case of Kenyan financial market.

1.4 Significance of the Study

The findings of this study will be important to the following groups:

Government Policy Makers

The study findings will provide the policy makers with an opportunity of understanding the issues and constraints that affect the development of the capital market in Kenya and in other emerging capital markets. It also helps the regulators to determine good regulatory framework which will facilitate the faster development of the capital market through policies and regulations which will create and enhance an enabling environment. The regulators include CMA, NSE and the government.

Investors

The study findings will assist investors with an opportunity of knowing the constraints facing the market and its future prospects.

Academicians

This study findings will provide academicians information regarding the performance of our capital market and particularly constraints facing it. It will also provide insight and act as a base for future research concerning the capital market.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature review of the study; the objective of the study is to investigate factors affecting the development of emerging capital markets. This chapter explores the theoretical models of stock markets, empirical findings of other research studies on the same subject. The empirical studies reviews that Market Information and Efficiency, Legal and Regulatory Framework, Political Climate, Market Transparency, Operating Cost, Tax Policy, Level of Countries Economic Growth and Transaction Processing System.

2.2 Theoretical Framework

2.2.1 The Efficient Market Hypothesis

Capital market development is an important component of financial sector development and supplements the role of the banking systems in economic development. Specifically, capital markets assist in price discovery, liquidity provision, reduction in transaction 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 Lieu(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 endeavor. Moreover, efficient markets not only avail resources to investors, they also facilitate inflow of foreign financial resources into the domestic economy. The fact that debt and equity markets are not thriving has seen the credit market play a significant role in financing investment while deposits form a significant proportion of the financial asset basket (Ngugi et al 2009).The efficient Market Hypothesis is the basic theory describing the behavior of a perfect market in which securities are typically in equilibrium, security prices fully reflect all public information available and react swiftly

to new information; because stocks are fully and fairly priced, investors need not waste time looking for mispriced securities.

There are three major versions of market Efficiency; weak, semi-strong and strong. Weak EMH states that prices on traded assets already reflect all past publicly available information. Semi-Strong EMH claims that both that prices reflect all publicly available information and that prices instantly reflect new public information. Strong EMH claims that prices instantly reflect every hidden information (Burton, 1996).

2.2.2 The behavioral Theory

The efficient Market theory concept was later challenged by academicians although there is sufficient evidence of the relevance of the theory. Academicians and other practitioners recognize that emotions and other subjective factors play a role in investment decisions which has resulted in a significant research which is referred to as behavioral finance (Gitman, 2006). Behavioral finance hold the view that, in practice, markets are far from perfect and investors are not rational but are motivated by greed, fear and other emotions. According to the behavioralists, many investors let their emotions overrule rational analysis. They say even the most rational investor cannot totally eliminate emotion. Emotion is an important aspect of human condition can influence decision making (Gitman, 2006). The emotional state of investors was no doubt the most important factors causing historical market dip in the NSE during the post election violence in 2008.

2.2.3 The Agency Theory

Agency theory has provided a useful tool for detailed analysis of the determinants of the complex contractual arrangement called the modern corporation. A survey of the application of this theory to the conflicts of interest between corporate managers, stockholders, and creditors find that the analysis of these conflicts and their resolutions increases the understanding of the survival of many contractual practices that therefore have been taken for granted or viewed with great suspicion. It also illustrates the often close relation between financial and organizational practices (Smith and Jensen,

2000). Under the theoretical model, the value of Institutions to shareholders results from their regulation of transactions and agency costs. Governance indicators are a reflection of the ability of institutions to effectively support the minimization of these costs, ultimately born by shareholders. These indicators compose measure of the stability of governments, the proper regulation of markets, and the degree of corruption. These factors shape the ability of institutions to govern the financial markets. Better governance environments can increase returns to shareholders by reducing both transaction costs and agency costs (Hooper et al, 2005).

2.2.4 The Capital Asset Pricing Model

This was a theory developed separately by William Shape (1964) and John Linter (1965) and used to identify the adequate cost of capital in project valuation (Brounen et al. 2004). Ball (2001) defines it as ‘a method of estimating expected returns which passive investors would otherwise have earned in the absence of information being tested’. The CAPM equation looks like this: $E(R) = R_f + b(R_m - R_f)(I)$. Stock’s expected return ($E(R)$) is equal to a riskless rate (R_f) plus risk premium compound by b and the amount of a stock of average risk (R_m) is expected to earn above riskless rate (R_f). CAPM was developed to explain the behavior of security prices and provide a mechanism whereby investors could assess the impact of the proposed security investment on portfolio overall risk and return, CAPM provides a useful conceptual framework for evaluating and linking risk and return. An awareness of this trade-off and an attempt to consider risk as well as returns in financial decision making should help managers achieve their goals (Gitman, 2006).

Over the past few decades the world stock market has surged and emerging markets have accounted for large amount of this boom. The speed and extent of stock market development in developing countries have been unprecedented and have led to fundamental shift both in financial structures of less developed countries and in the capital flows from developed nations.

A key indicator of stock market development, the capitalization ratio (market capitalization as proportion to GDP) rose at an unprecedented rate in leading developing economies during 1980s and the 1990s climbing from 10 to over 84 percent in countries such as Chile in the course of two decades.

New theoretical research works show that market development might boost economic growth and empirical evidence tends to provide some support to this assertion. Levine and Zervos (1998) for instance, find that stock market development plays an important role in predicting future economic growth. Capital markets are an essential part of the financial sectors of modern economies, providing alternative savings posts tools and non-bank sources for financing for enterprises, the markets promote economic growth through improved efficiency in savings mobilization (Schmidt –Hebbal et al, 1996).

Porter (1993) observes that over the past few years, investor interest in the world's emerging markets has expanded significantly. That has been fuelled by the relatively high return recorded by emerging market and by their perceived potential for large returns in the future. Barry and Lockwood, (1995) also noted that emerging capital markets recently have attracted the attention of global investors and scholars alike. The markets are characterized by high average returns, high volatility and excellent diversification prospect in combination with portfolios from developing markets.

Kimura and Amoro (1999) found that there was a poor degree of correlation between economic growth and growth of the stock exchange. The former averaged 3.8% in the period 1985 – 1996 while the later averaged only 0.6% as measured by the number of quoted companies. The results indicated that a major factor is general lack of awareness and information on the role, functions and operations of the stock exchange.

2.3 Characteristics of Emerging Capital Market

Ellefsen, (2004) noted that emerging capital markets show the following characteristics which distinguish them from developed Capital market.

First, market size in emerging markets is far smaller than developed markets. The overall size of their economies and the size of their financial market in relation to their economies as a whole is relatively small compared to developed countries.

Secondly the market is not open to all. Foreign investors are restricted. There is an ownership restriction.

Thirdly, there is market inefficiency in emerging market. New information is not quickly reflected in the securities prices.

Fourthly, the policy enrolments in many emerging markets are very unstable.

Fifthly, market liquidity in emerging markets is illiquid. Investors in merging market are particularly concern about the case of capital movement owing to emerging markets spotty liquidity.

Other characteristics include low market activities (few companies keep the market active) few market intermediaries lack of electronic trading, no qualified personnel of emerging capital markets. The term emerging capital market may be used to mean the same as “emerging stock market. However the term “capital” could involve various combinations of debt and equity securities. The broadness and similarities in what constitute stock and capital explain why we use such terms as emerging capital market and emerging stock market interchangeably. In strict legal sense however the two terms are somewhat different.

Emerging capital markets are financial markets that reside in the low or middle income economies or where the ratio of investible market capitalization to GNP is low. Such parameters to classify based on the above two criteria the bond market of Hong Kong and Singapore are classified as the emerging capital markets. The emerging capital markets nations have a large population size but a very low share of world GNP. Out of 155 of the emerging market Nation’s only 81 have equity market.

Barry and Lockwood (1995) observe on the definition provided by IFC that the World Bank's guide line is that a developing country is one with low-to-middle income which in 1992 meant a per capita GNP (Gross National Product) of less than US \$8,356(Washington OC; IFC August 1998).

In the above definition most of the markets classified as emerging markets might be omitted. Generally there is an overlap between markets identified by some as "emerging" and those that are identified as developed.

As a result of lack of clarity in the definition of emerging markets the study will take a departure from the restrictive lists provided by the economist and IFC. Instead it will argue that the term emerging stock market covers mainly stock markets in developing countries which have not yet developed to the same levels of sophistication and market capitalization as stock markets in a number of developed countries.

2.4 Role of Capital Markets

There has been consideration interest in the development of capital market in many developing countries in the last twenty years or so and evidence of the role of financial markets in economic development is well documented.

Goldsmith (1969) in a study of 36 countries drawn from both developed and developing countries over the 100 years institutions' assets to GNP and output per person. Gold Smith presented data showing that (with some exceptions) periods of more rapid growth in the economy have been accompanied by an above average rate of financial development.

Levine (1990) shows that stock markets accelerate growth by facilitating the ability to trade ownership of firms without disrupting the productive process occurring within firms and allowing investors to hold diversified portfolios.

The stock exchange helps to mobilize domestic savings thereby bringing about the reallocation of financial resources from dormant to active agents. Long term investments are made liquid as the transfer of securities between shareholders is facilitated (Masinde and Kibua 2004).

The capital markets facilitates the mobilization and allocation of medium and long term funds for productive investment by; Providing a simple mechanism for the transfer of funds, facilitating companies access to a large number of local and foreign investors. Widening the array of financial instrument available to savers and investors; increasing diversity and competition in the financial systems and lastly providing market signals on current situations and future expectations (Wambui Kibuthu, 2005).

Generally, the effective functioning of capital market requires the following; existence of an exchange clearing and settlement system, existence of a legal system to enforce contracts and the availability of information on financial soundness and future prospects of companies and governance of corporations in a manner that gives investors confidence that their funds may not be stolen or wasted (World Bank).

2.5 Challenges in Developing Capital Markets

There has been a considerable development in the African Capital Market since early 1990s. Prior to 1989; there were just five stock exchanges in the sub-Saharan and three in North Africa. Today there are nineteen stock exchanges ranging from startups like Uganda and Mozambique stock exchanges to the Nigeria and Johannesburg stock exchanges with the exception of South Africa, most African stock markets doubled their market Capitalization between 1992 and 2002.

The rapid development of stock markets in Africa does not mean that even the most advanced African stock markets are mature. In most of these stock markets, trading occurs in only a few stocks which account for a considerable part of the total market capitalization. Beyond these actively traded shares, there are serious information and

disclosure deficiencies for other stocks. Further supervision by regulatory authorities is often far adequate.

Indicators of stock market development show that Africa markets are small with few listed companies and low market Capitalization. Demirguc-Kunt and Levine (1993) indicated traits of characteristics of stock market development as: market capitalization, the number of listed companies, new capital raised through offering, information disclosure, transparency rules, trading costs and market efficiency.

Many of Africa Stock exchanges are small, underdeveloped, and illiquid. They tend to operate in isolation from other markets, have low trading volumes are sheltered from competition by national regulations and face barriers to capital mobility. Low liquidity means that it will be harder to support a local market with its own trading system, market analysis, brokers and the like because the business volumes would simply be too low.

Institutional and Infrastructural indicators, like the existence of a strict market regulator, governing law and nature of trading systems have discouraged local entrepreneurs and indigenous enterprises that wish to raise funds from capital market. These barriers facilitate stock exchange to operate like closed membership organization (Asea, 2003).

According to Sheehan and Zavala (2005), it is difficult to create an efficient regulating system. Lack of trained manpower and experience to adequately police the modern regulatory schemes (Asea, 2003). Pardy (1992) contends that there are two building blocks necessary for thriving a security market;

First a macroeconomic and fiscal environment conducive to the supply of good quality securities and sufficient demand for them. Secondly, market infrastructure capable of supporting efficient operations of the securities market. The market infrastructure include; institutional infrastructure which provides the operational basis for the market, relates to intermediaries that provide trading investment, management and financial advisory services; Secondly, the regulator relates not only to the government body has the power and responsibility to supervise the market, but also include self regulatory

organizations such as Stock exchange, Accounting Standards Boards and Accounting and Auditing Professional Association and Thirdly; the legal framework. Poor savings culture in Africa has constrained demand and supply of equity in the stock market due to the diverse reasons; poverty, war., unrest and diseases.

Kofi (1998) found the following factors to have constrained the development of Ghana Stock Exchange; Lack of effective educational Campaign, manual clearing System, lack of Central Depository Control System, low level of public awareness, restriction of foreign investors, inappropriate regulatory factors and Macro economic and fiscal factors.

In most emerging economies there is a large number of relatively small-family owned businesses, where there is little or no effective division of ownership and control. This type of business structure conduces to internal shareholding, the bequeathing of shares to family members and use of own funds and bank credit rather than capital market financing.

2.6 Empirical Studies

Factors Affecting the Development of Capital Market

2.6.1 Market Information and Efficiency

Lack of awareness is a major factor and information on the role, functions and operations of the stock exchange. For companies, the question is not so much lack of knowledge but a concern that the risks associated with additional disclosure are not adequately compensated by additional returns. Public disclosure of relevant information about securities is important for both pricing efficiency and market confidence.

Chupe and Atkin (1992) contend that information asymmetries abound in financial markets. Disclosure requirements for Public companies must ensure that financial information is available to investors in way that facilitates intercompany comparisons.

Pardy (1992) and Pagano (1993) reaffirmed the need of adequate disclosure of sufficient information by companies who desire to raise funds from the public. This disclosure will facilitate increased investors' confidence in the stock markets. Those companies issuing securities should be subjected to additional disclosure as imposed by the listing rules. In emerging markets, there are many barriers to the dissemination of information and information asymmetries are profoundly found in these markets. Trading on insider information is common and tends to destabilize the stock market particularly where the financial system is controlled (Kumar and Feldman, 1995; Chuppe and Atkins, 1992). Also a study by Cheung and Krinsky, (1994) confirmed under-pricing of securities by investment banks in an environment of information asymmetry.

In addition, banks tend to indirectly discourage the stock exchange as a means of raising capital since they play the dual role of being investment advisors as well as lenders. For the stock exchange itself, there is both inadequate marketing of itself as well as lack of a sufficient number of products to attract the investing public.

2.6.2 Legal and Regulatory Framework

Legal and broader institutional environment plays an important role in the development of the financial markets. Laws and enforcement mechanisms that protect investors, clearly define property rights and support private contractual arrangements are crucial for adequate functioning of financial markets. Empirical evidence shows that regulations that protect creditors and minority investors are associated with deeper and more active financial markets, increased valuations, lower concentration of ownership and control, greater dividends payout.

Beck (2000), an empirical study done in Brazil observed that legal environment is the first impediment to financial system development. Beck found a strong relationship between the financial development and legal environment. Levine (1999) also found a strong link between legal environment and financial development.

In order to facilitate capital development in the emerging market, the legal environment should be favorable. The environment should prove laws and regulations which not prohibitive in nature. In Kenya, CMA has been mandated to regulate the capital market. Currently, there are multiplicity of regulators and regulations in Kenya governing the capital market. They include the Central Bank of Kenya, Capital Markets Authority, Retirement Benefits Authority and Commissioner of Insurance. All these bodies enact policies that affect the development of the stock Market.

The Capital Markets Authority as the regulatory agency must alter its approach from the sometimes heavy-handed type of control to a more proactive, creative and supportive role in order to assist in the creation of a more vibrant and forward looking capital market environment. This it can do by seeing itself as a catalyst in development rather than as a traditional regulator of what is a very small market.

2.6.3 Political Climate

The political climate prevailing at any given time in the country will affect the development of the stock market. Political instabilities like wars, coups, insecurity, uncertainty of general elections etc affect investment decisions. (Levine and Zervos 1996).

2.6.4 Market Transparency

Analyzing the amount of information available in the emerging markets raises the notion of the accuracy of the information. The degree to which markets are transparent and competitive affect investors' ability to gain information and develop performance expectations. Though all markets exhibit varying degrees of transparency, emerging markets are likely to be less transparent than developed market.

Transparency in dealings will enhance the market confidence. In NSE most of the dealings are done through brokers which can enhanced limited disclosure of some vital information which can lead to of market manipulation. (Ossei, 1998).

2.6.5 Operating Cost

The operating-transaction costs should be within acceptable limits aimed at minimizing returns. These costs include: brokerage fees, cost of printing, legal & accounting expenses and fees for NSE.

2.6.6 Market Openness

Market can be open or closed to foreign investors. Excessive barriers especially to foreign investors hamper the development of any stock exchange. Example is the Kenyan 25% rule where investors are to allow the locals to own 25% of holding in any foreign investment in Kenya.

Bruner et al (2003) studied 33 developing countries to ascertain the extend of market openness in those countries. However, they noted that only 18 out of 33 listed as emerging markets are 100% open to foreign investment and the remaining 15 markets are either closed to foreign investment or having varying restrictions on foreign ownership. The most common restriction include; special classes of shares for foreign owners; limits on foreign ownership; limits on ownership held by a single foreign shareholder; company imposed limits that differ from national law; and national limits on aggregate foreign ownership.

Demirgug & Levine (1996) finds that he restriction placed on foreign investors on the above restrictions constrain the performance of the capital market. However the restrictions vary from one country to the other.

2.6.7 Tax Policy

If the fiscal policies are not favorable then the market will be drastically affected.

Different rates influence how investors will invest their funds and in which security which has high net margins (Wagacha, 2004)

Demirgug-Kunt and Huizinga (1992) study has implication for the design of tax policy related to foreign portfolio investment in developing countries. They indicate that the

existence of foreign tax credits for dividends paid suggests that a country should tax capital gains lightly in comparison with repatriated dividends. Lyon(1992) finds that differing tax treatment of equity and debt can create divergent costs in the used of retained earnings, new share issue and debt finance.

2.6.8 Level of Countries Economic Growth

The empirical evidence clearly shows that more developed countries have deeper and more efficient financial systems, including capital markets(Beck et al.2003).Monetary and fiscal policies, as well as economic stability are also positively related to capital market development. The reason is that the financial contracting becomes more difficult in high inflation environment.

Income levels affect the performance of the markets. Countries with high income are more developed compared to low income countries (Beck, Levine and Laoyza, 1999, Cull 1998).

Pardy, (1992) noted two variables which are necessary for the faster development of capital market: macroeconomic and fiscal environment and market infrastructure. The macroeconomic factors include; inflation, interest rate; foreign exchange rates; government expenditure.

The size of the economy may affect capital market development. Security market may gain efficiency by expanding their volumes and number of participants through both supply and demand .Also, larger economies tend to have larger firms, which are likely to have minimum threshold necessary to achieve adequate liquidity.

2.6.9 Transaction Processing System

The transaction clearance and settlement systems, securities transfer, registration and custody will affect the development of the stock market. This challenge is being addressed in Kenya by the introduction of the CDS system.

The Nairobi Stock Exchange has experienced lacklustre performance over its entire existence since it was founded in 1954. Over the years the number of stocks traded have stagnated at around 55 quoted companies. Ordinarily one would expect to find a significant degree of correlation between economic growth and the growth of the stock exchange. The former has averaged 3.8% p.a. in the period 1985-1996 while the latter averaged only 0.6% as measured by the number of quoted companies. This study will help highlight factors which contributed as to why there has been such low growth in the exchange.

Summary of the Literature Review

From the literature review, capital market development appears to be a function of macroeconomic and Institutional factors. These are Market Information and Efficiency, Legal and Regulatory Framework, Political Climate, Market Transparency, Operating Cost, Tax Policy, Level of Countries Economic Growth and Transaction Processing System.

Levine and Zarvos (1998) find a strong relationship between strong market liquidity and capital market development. Pagano (1993) finds a strong relationship between regulatory and institutional factors and stock market development. Levine (1996) finds that countries with well developed stock markets also have better developed financial intermediaries. Yartey (2009) finds that macroeconomic factors such as income level, gross domestic investments, banking sector development, private capital flows, and stock market liquidity are important factors affecting the development of capital market in emerging market. Political factors, law and order are also factors which affect capital market development in emerging market

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discussed the methodology used in gathering data, analyzing it and reporting the results. The researcher aimed at explaining the methods and tools used to collect and analyze data to get proper and maximum information related to the subject under study.

3.2 Research Design

A descriptive research design was used at finding out the factors affecting the development of an emerging Capital market. A descriptive research design is a technique for answering who, why and how questions Yin (1994) defines a case study as '...empirical enquiry that investigates a contemporary phenomenon within its real life context, when the boundaries between phenomenon and the context are not clearly evident, and in which the multiple source of evidence are used. The descriptive research design aimed at identifying factors that affect the development of capital market in emerging economies.

3.3 Target Population

The population comprised of the 56 listed companies in NSE for the period 2005-2010. The listed companies highlighted the role and benefits accrued in being listed and challenges encountered. The central Bank of Kenya provided the economic growth data from the period 2005-2010 through their monthly and annual economic review publications. The focus of the study was on the emerging market development. NSE provided more information considering the empirical evidence as stated above. Empirical evidence shows that there is a perfect correlation between well developed stock market and economic growth (Corporale et al, 2004).

3.4 Data Collection

The study used secondary data in ascertaining the factors which highlighted both the macroeconomic and institutional factors on the development of the capital market. The central bank of Kenya provided details of GDP for the period 2005-2010. Both NSE and Central bank provided details of both macroeconomic and institutional factors which include; stock market liquidity, macroeconomic stability; savings and investments; income levels; private capital flows; law and order and political risk. The period covered will be 2005-2010

3.4.1 Measurement of Variables

Stock Market Liquidity (SML)- The study measured stock market liquidity using value traded as percentage of GDP. This data was provided by NSE.

Macroeconomic Stability (MS)- According to Garcia and Liu(1999),inflation can be used as a measure of macroeconomic stability through data from Central Bank Of Kenya(CBK).

Income Levels (IL)- This study used GDP per capita in Kshs to measure the income level per capita income. This explained the critical factors influencing the growth of the stock market. This data was obtained from Kenya National Bureau of Statistics (KNBS).

Private Capital Flows (PC)- This study measured foreign investment as percentage of GDP and net Capital flow as a percentage of GDP. Data on this variable was obtained from NSE.

3.5 Data Analysis

Since secondary data was used, descriptive statistics analysis was used: measures of central tendency, measures of variability, and measures of frequency among others such as frequencies, mean scores, regression analysis and the standard deviations. On the other

hand qualitative data was analyzed using factor analysis. Factor analysis was preferred because it allows for both quantitative and qualitative operations.

The quantitative data was coded and thereafter analyzed using SPSS package (Eviews-Version 3.1). The study used regression analysis to determine the relationship between the variables of the study. Studies by Yartey (2008) and Lazaridis and Troforidis (2006) have used regression analysis while researching on relationship among variables.

The variables: income levels, banking sector development, savings and investment, and stock market liquidity all use GDP as the measurement variable upon which the stated variable is measured. However the independent variables will be market capitalization, trading volumes and change in stock prices. Market capitalization was calculated using annual share price and shares issued. The study was also analyzed using multivariate regression model and SPSS which aided the analysis.

The following is regression model was used in determining the impact of each stated variable in the Stock Market Development.

$$V = a(IL) + b(BSD) + c(SI) + d(SML) + e(MS) + f(PC) + g(IQ)$$

Where:

V	Stock Market Development
BSD	Banking Sector Development
SML	Stock Market Liquidity
PC	private Capital flows
IL	Income Levels
SI	Savings and Investments
MS	Macro Economic Stability
IQ	Institutional Quality

However, the coefficients $a, b, c, d, e, f,$ and g represents the constants variables to the respective independent variables and shows the existing relationship between each of the independent variables and the dependable variable.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Introduction

This chapter discusses the data analysis, findings, interpretations and presentation. The objective of this study was to study factors affecting the development of emerging Capital markets-The case of Nairobi Stock Exchange. The chapter starts with data analyzed using descriptive statistics, then regression analysis.

4.2: Descriptive Statistics Variables

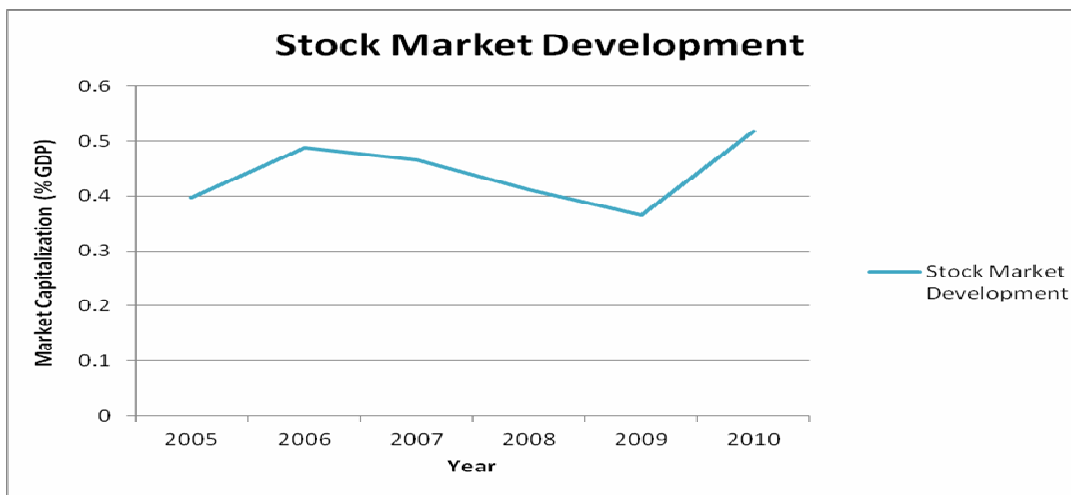
Table I: Descriptive Statistics Variables

	V	BSD	IL	SML	MS	PC	IQ	SI
2005	0.3263	0.285	40,292.00	0.0258	4.9	0.0017	0.0873	0.1164
2006	0.4881	0.2754	44,899.00	0.0585	7.3	0.0007	0.1295	0.1327
2007	0.4653	0.284	49,204.00	0.0485	5.6	0.0245	0.1598	0.1516
2008	0.411	0.3142	54,371.00	0.0058	17.8	0.0207	0.0337	0.1439
2009	0.3659	0.3287	57,887.00	0.0057	5.3	0.0016	0.0125	0.1501
2010	0.5184	0.341	63,184.00	0.0488	4.51	0.007	0.17	0.5661

4.2.1 Stock Market Development

The dependable variable of interest is stock market development .We measure stock market development using market capitalization as a proportion of GDP. This measure equals the value of listed shares divided by GDP. The assumption behind this measure is that the overall market size is positively correlated with the ability to mobilize capital and diversify risk on an economy wide basis. The primary role of stock market is to provide a market where financial instruments can be traded in a regulated environment without constraints.

Figure 4.1: Stock market development as percentage of GDP



Stock Market Development expanded from 2005- 2008, contracted in 2009 then expanded in 2010. Market development has grown by 59% from 2005 – 2010 (0. 3263 to 0.5184).

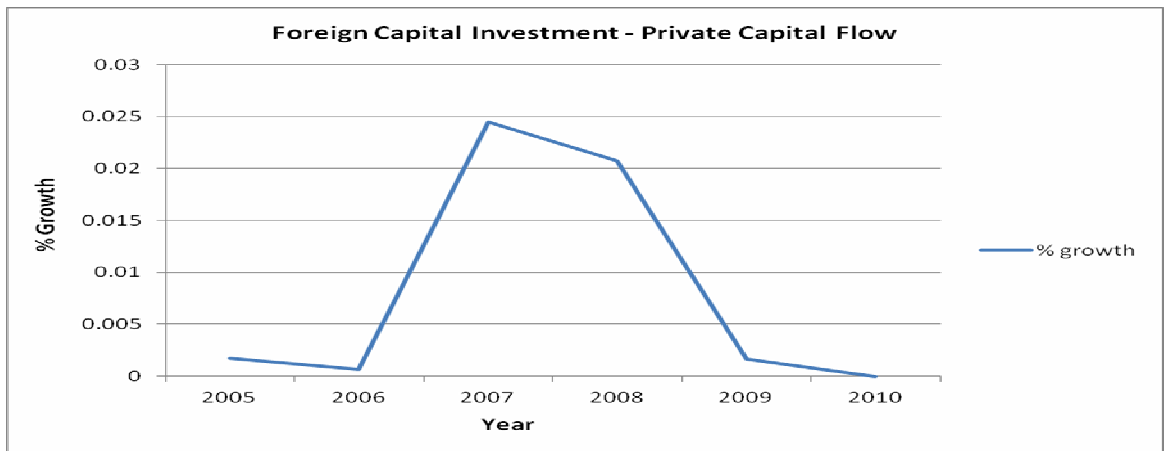
4.2.2 Market Capitalization Ratio

This measure equals the value of listed Shares divided by GDP. The assumption behind this measure is that overall market size is positively correlated with the ability to mobilize capital and diversify risk on economy wide basis. The total value traded ratio measures the organized trading

4.2.3 Foreign Direct Investments (FDI)

Flow of foreign direct investment to and from the country is used as a control variable since we believe that foreign direct investment is an important determinant of economic growth.

Figure 4.2: Foreign Capital Investment as percentage of GDP

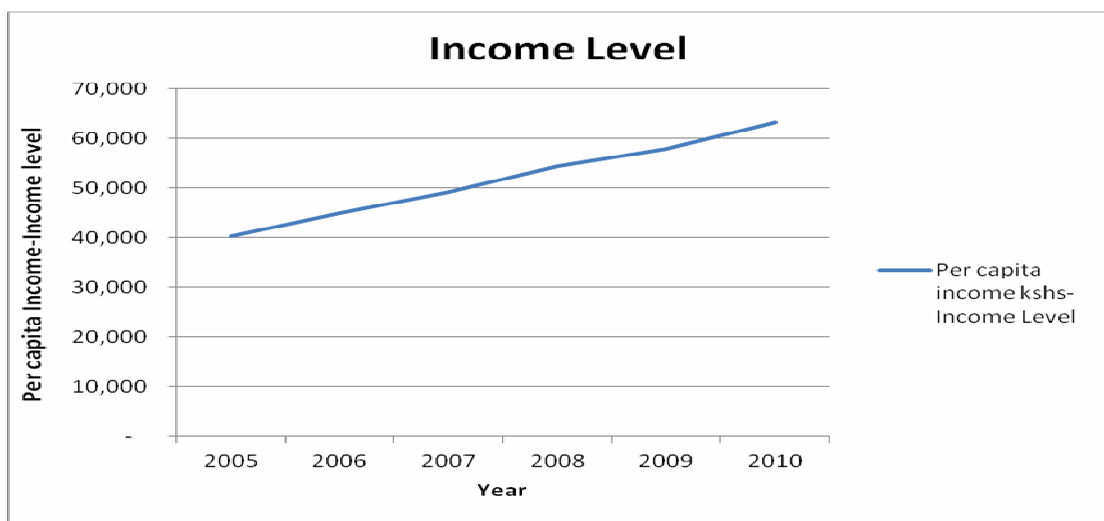


The foreign Capital investment increased from 2006 to 2007 (0.0017-0.0245) by 1,176% then started declining to 2010 by 82% (.0245 to .007).

4.2.4 Income level

Real income has been found to be highly correlated with the size of the stock market. We use the log. GDP per capita in Kshs. to measure the income level. According to demand driven hypothesis, the expansion of an economy will create new demand for financial services, such increase in demand will exert pressure to establish larger and more sophisticated financial institutions to satisfy the new demand for their services.

Figure 4.3: Per Capita Income levels in Kshs.

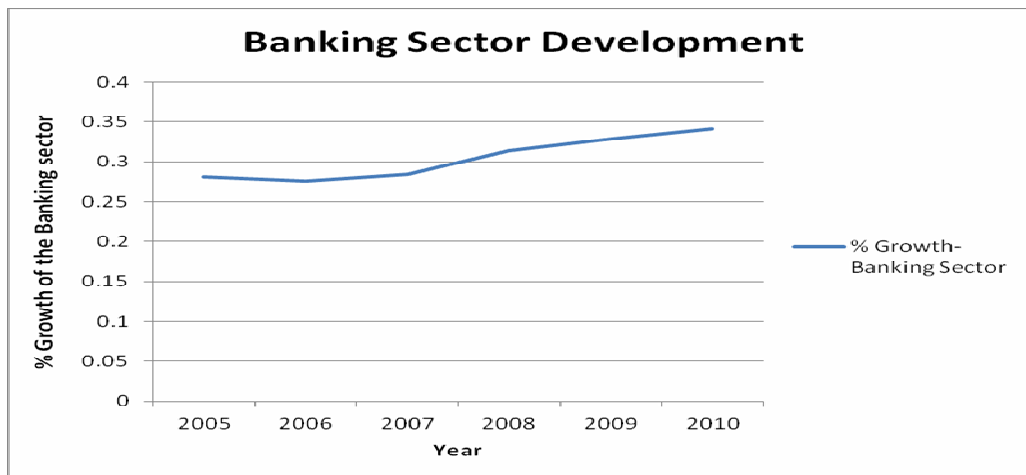


From the above graph, it is observed that per Capita Income level has been increasing steadily from 2005-2010.

4.2.5 Banking Sector Development

In order to determine whether stock market development is significantly correlated with banking sector development, we include a measure of banking sector development in the regression. It uses the value of domestic credit provided by the banking system to private sector relative to GDP as a measure of banking sector development. Private credit is the most comprehensive indicator of the activities of commercial banks.

Figure 4.4: Banking Sector Development as percentage of GDP



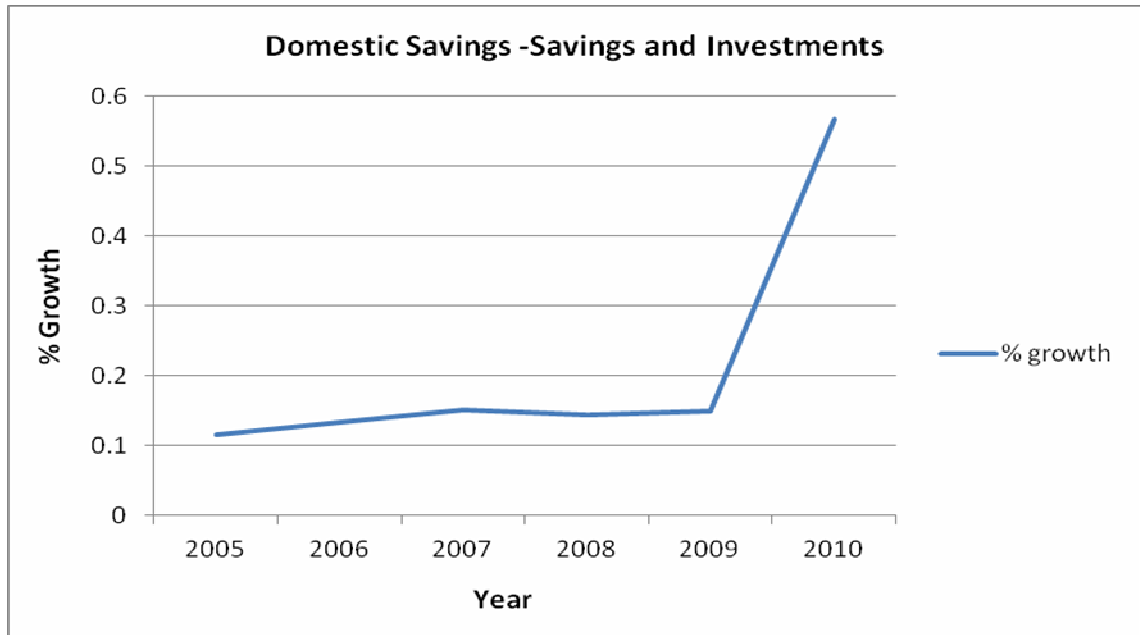
The Banking Sector Development has grown from 2005-2010 by 21% (0.285 to 0.341).The banking sector development has been on the upward trend which shows good indicator towards future stable financial market.

4.2.6 Savings and Investments

Stock markets like financial intermediaries' intermediate savings to investment projects. Domestic savings is equal the sum of household and enterprise savings, usually the higher the savings, the higher the amount of capital flows through the stock market. We usually expect savings and investments to be important determinants of stock market

development. However, savings and investments may not be highly correlated with income. We use gross domestic savings as % of GDP and gross investment as % of GDP.

Figure 4.5: Domestic Savings as percentage of GDP



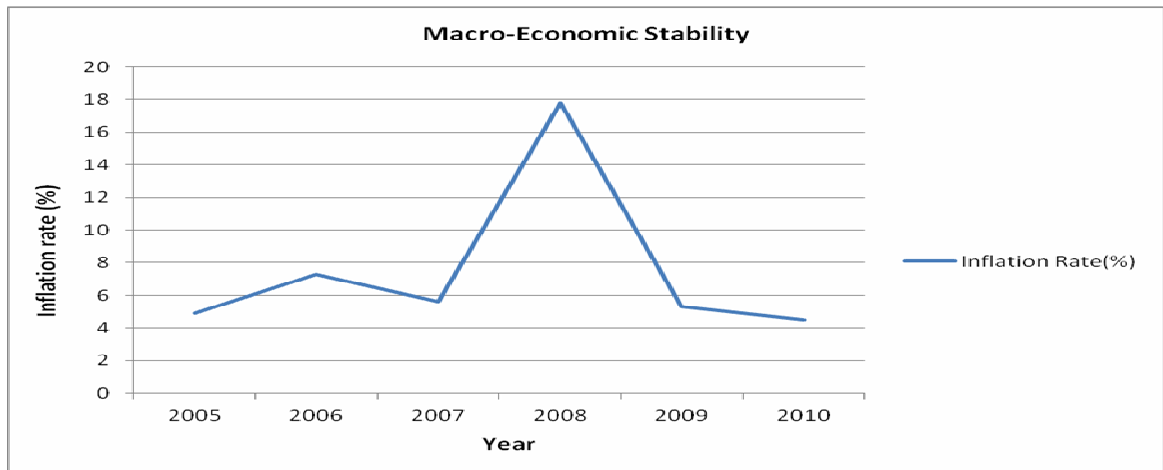
Domestic Savings have been growing steadily from 2005-2009; however it grew rapidly in 2009-2010. It is worth noting that domestic savings grew by 280% (from 0.1501 to .5661).

4.2.7 Macroeconomic Stability

Macroeconomic stability is a very important factor for the development of the stock market. We expect that the higher the macroeconomic stability the more incentive firms and investors have to participate in the stock market. Furthermore, corporate profitability can be affected by changes in the monetary, fiscal and exchange rate policies. Therefore, we expect the stock market in countries with a stable macroeconomic environment to be more developed. To determine the impact of macroeconomic stability, real interest rate and current inflation are mainly considered because of their importance in previous studies. Regarding inflation, the conventional wisdom about the role of stocks is that they provide

a hedge against inflation or that the nominal equity should be positively related to inflation.

Figure 4.6 Inflation Rate Trends 2005-2010



The inflation rate increased from 2005-2008, then it declined from 2008-2010. The highest inflation rate was experienced in the year 2008 with an annual rate of 17.8% thereafter decline 5.3% in 2009 and further decline to 4.51% in 2010.

4.2.8 Stock Market Liquidity

Liquidity is the ease and speed at which economic agents can buy and sell securities. With liquid markets the initial investors do not lose access to their savings for the duration of the investment projects because they can easily, quickly, and cheaply sell their stake in the company. Thus more liquid markets could ease investments in long-term. Potentially more profitable projects, thereby improving the allocation of capital and enhancing prospects for long term growth. The more liquid the stock market the larger the amount of savings that are channeled through the stock market. Therefore we expect a more liquid market to lead to higher stock market development. We measure stock market liquidity using value traded as a percentage of GDP. This ratio measures the value of equity transactions relative to the size of the economy. This measure does not directly measure how easily investors can buy and sell shares at posted prices. However, it does

measure the degree of trading relative to the size of the economy. It therefore reflects stock market liquidity on an economy-wide (Levine and Zervos, 1998).

Figure 4.7: Stock Market Liquidity as percentage of GDP 2005-2010



Stock Market liquidity grew in the years 2005-2006 then it declined up to year 2008. It started to increase in the years 2009-2010. The stock market liquidity was at the peak in 2006 (0.0585) then closely followed by 2007 (0.0485). It was at the lowest in the years 2008 & 2009 respectively (0.0058 & 0.0057). This confirms that market liquidity is also determined by institutional quality.

4.2.9 Institutional Quality

The increase in foreign capital inflows in the emerging markets raises the issue of political risk. When foreign investors decide to invest in emerging markets they face three different kinds of risks: economic risk, financial risk and political risk. Low political risk demonstrates the existence of good quality institutions. Institutional quality is broadly measured by: firstly the quality of governance, including corruption, political rights, public sector efficiency and regulatory burdens, secondly is the legal protection of private property and law enforcement and thirdly is accountability and the limits placed on the executive and political leaders (Edison, 2003). In measuring political risk, a composite index from the International Country Risk Guide as a measure of institutional quality. The ICRG Risk Rating system assigns a numerical value to a predetermined

range of risk components according to pre-set weighted scale for each country covered by the system. The composite Political risk Index is 100 point scale. The highest overall rating (Theoretically, 100) indicates the lowest risk and the lowest score (Theoretically, 0) indicates the highest risk. Political risk is a factor for which investors are rewarded and that it strongly affect the local cost of equity which may have implication for growth. We expect countries with good quality institutions and therefore low political risk to have a well-developed stock market.

Figure 4.8: Institutional Quality- Political Risk Index



The Political risk increased in 2005-2008, and then it started decreasing to 2010.

4.3 Relationship between Dependent variable and Independent Variable

4.3.1 Correlation Analysis: Pearson Correlation

Table 4.2: Pearson Correlation

	V	BSD	IL	SML	MS	PC	IQ	SI
V	1.0000							
BSD	-0.4540	1.0000						
IL	0.0164	0.8743	1.0000					
SML	0.7151	-0.9017	-0.6146	1.0000				
MS	0.1361	0.3338	0.3741	-0.4202	1.0000			
PC	0.3651	0.0281	0.2907	-0.0156	0.4888	1.0000		
IQ	0.6316	-0.9065	-0.6291	0.9376	-0.3865	0.2438	1.0000	
SI	0.4095	0.5094	0.8464	-0.1696	0.1952	0.5651	-0.1226	1.0000

Interpretation of the correlated Findings: Correlations (Using SPSS –Appendix 3)

The findings indicate that market development is determined by stock market liquidity and institutional quality, showing high relationship between them. Stock market development is determined by stock market liquidity and institutional quality. This is because Pearson correlation coefficient between stock Market Development and stock market liquidity and institutional quality indicated high relationship among them. However, over the study period income per capita, macroeconomic stability (inflation), domestic savings and private capital flows, bank development seem not influence stock market development.

4.3.2 Regression Analysis and interpretation of the findings

In order to establish the relationship and effects of stock market liquidity and institutional quality, income per capita, Macroeconomic stability-inflation, domestic savings and private capital flows and bank development on stock market development regression analysis was conducted. A multivariate regression model was applied to determine the

relative importance of each of the four variables with respect to the Stock market development. The regression model was as follows:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Where:

y = Stock market development

β_0 = Constant Term

β_1 = Beta coefficients

X_1 = Stock market liquidity and institutional quality

X_2 = Income per capital

X_3 = Macroeconomic stability-inflation

X_4 = Domestic savings and private capital flows

X_5 = Bank development

ϵ = Standard error

Table 4.3: Pearson Correlation Correlations

	Y	X ₁	X ₂	X ₃	X ₄	X ₅
y	1					
X ₁	0.536	1				
X ₂	0.752	0.618	1			
X ₃	0.567	0.628	0.747	1		
X ₄	0.607	0.754	0.654	0.678	1	
X ₅	0.569	0.607	0.752	0.536	0.536	1

Source: Researcher 2011

Strength of the model

Analysis in table below shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R² equals 0.843, that is, stock market liquidity and institutional quality, income per capita, Macroeconomic stability-inflation, domestic savings and private capital flows and bank development leaving only 15.7 percent unexplained. The P- value

of 0.000 (Less than 0.05) implies that the model of Stock market development is significant at the 5 percent significance or the 95% confident level.

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.918(a)	.843	.805	.51038	.843	1.242	4	96	.000

Source: Researcher 2011

Predictors: (*Constant*), stock market liquidity and institutional quality, income per capita, Macroeconomic stability-inflation, domestic savings and private capital flows and bank development. **Dependent Variable:** Stock market development

Table 4.5: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	.852	4	.213	1.242	.000
Residual	6.173	36	.171		
Total	7.024	40			

Source: Researcher 2011

Predictors: (*Constant*), stock market liquidity and institutional quality, income per capita, Macroeconomic stability-inflation, domestic savings and private capital flows and bank development

Dependent Variable: Stock market development

ANOVA findings (P- value of 0.00) in table 5 shows that there is correlation between the predictors variables (*stock market liquidity and institutional quality, income per capita, Macroeconomic stability-inflation, domestic savings and private capital flows and bank development*) and response variable (Stock market development)

Table 4.6: Coefficients of regression equation

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
(Constant)		.260	.460		0.565	.231
Stock market liquidity and institutional quality	X ₁	.131	.048	.254	2.729	.001
Income per capital	X ₂	.170	.045	-.300	3.778	.000
Macroeconomic stability-inflation	X ₃	.051	.023	.113	2.217	.002
Domestic savings and private capital flows	X ₄	.048	.022	.093	2.182	.000
Bank development	X ₅	.170	.045	-.300	3.778	.000

Source: Researcher 2011

Dependent Variable: Stock market development

The established multiple linear regression equation becomes:

$$Y = 0.260 + 0.131X_1 + 0.170X_2 + 0.051X_3 + 0.048X_4 + X_50.170$$

Where

Constant = 0.260, shows that if *stock market liquidity and institutional quality, income per capita, Macroeconomic stability-inflation, domestic savings and private capital flows and bank development* all rated as zero, **Stock market development** would be 0.260

X₁= 0.131, shows that one unit change in *Stock market liquidity and institutional quality* results in 0.131 units increase in *Stock market development*

X₂= 0.170, shows that one unit change in *Income per capital* , results in 0.170 units increase in *Stock market development*

$X_3 = 0.051$, shows that one unit change in Macroeconomic stability-inflation results in 0.051 units increase in Stock market development

$X_4 = 0.048$, shows that one unit change in Domestic savings and private capital flows results in 0.048 units increase in Stock market development

$X_5 = 0.170$, shows that one unit change in Bank development results in 170 units increase in Stock market development

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of findings and Discussion

Theoretically, a growing literature argues that stock market development boost economic growth. Greenwood and Smith (1997) show that large stock markets can decrease the cost of mobilizing savings thus facilitate investment in most productive technologies. It is also observed that liquidity is crucial for growth. In principle a well-developed stock market should increase savings and efficiently allocate capital to productive investments which leads to an increase in the rate of economic growth. In this study, it is evident through the regression analysis that stock market development is strongly correlated with the growth rates of real GDP per capita. More importantly, both stock market liquidity and banking development predict the future growth rate of the economy when they both enter the growth regression. This study was to identify factors that affect the development of capital markets in emerging markets-The case of Nairobi Stock Exchange. However, descriptive and regression approach was used in data analysis and secondary data collection method was used.

This research provides a simple correlation between stock market variables and investment in order to evaluate the impact on stock market development. A secondary data was collected for all listed companies in NSE from 2005-2010 suggest that stock market development is determined by the level of: stock market liquidity and Institutional quality as shown be the regression analysis.

The results also suggest that the value of shares traded ratio is not an effective measure of stock market liquidity. This may be especially so in the contest of Kenya where stock market is highly volatile causing the turnover ratio to be misleading indicators of liquidity. However, much work remains to be done to better understand the relationship between market development and economic growth.

In view of the above results, we can say that stock market development is positively correlated to economic growth through the following factors: banking sector development, stock market liquidity, per capita income, Foreign Direct Investments, Income levels, Macroeconomic Stability, Institutional Quality and Savings and Investments. Hence this study suggests that the government should play a more positive role in order to foster stock markets.

Even though, having recognized the importance of financial market for economic growth, many developing countries have increased their efforts towards improving the financial systems of their countries to stimulate economic growth, they have mainly focused on banking system reforms-removing interest rates controls, reducing government involvement in credit allocation, minimizing of taxation of financial intermediaries, managing bank insolvency, now they need to focus on stock markets. Policy matters should encourage stock market development. They should remove impediments to stock market such as tax, legal and regulatory barriers.

The findings of this study indicate that stock market development does indeed influence economic growth. The findings of the study are : the size of the stock as indicated by market capitalization ratio positively affect economic growth significantly, while the liquidity of the stock market as captured by total value of shares traded and turnover ratio and volatility significantly affect stock market development negatively. The study recommends that NSE needs to be developed further to enhance domestic resource mobilization.

The findings also indicate that market development is determined by stock market liquidity and institutional quality, showing high relationship between them. Stock market development is determined by stock market liquidity and institutional quality. This is because Pearson correlation coefficient between stock Market Development and stock market liquidity and institutional quality indicated high relationship among them. However, over the study period income per capita, macroeconomic stability (inflation),

domestic savings and private capital flows, bank development seem not influence stock market development.

5.2 Conclusion and Recommendations

In analyzing the collected data, the results revealed that there is a relationship between stock market development and market liquidity, institutional quality, income per capita, domestic savings and bank development. However, there are some variables which didn't clearly show the above relationship, namely macroeconomic stability-inflation and private capital inflows. It can therefore be concluded that stock market development is determined by stock market liquidity, institutional quality, income per capita, domestic savings and bank development.

In the empirical analysis the study found four interesting results: Firstly, income levels, domestic investments, banking sector development, private capital flows and stock market liquidity are important determinants of stock market development in emerging markets, Secondly, the relationship between banking sector development and stock market development in emerging countries to be non-monotonic. This finding suggests at early stages of its development, the banking sector is a compliment to the stock market in financing investment. However, as the both develop, banks and stock market begin to compete with each other as vehicles for financing investments, Thirdly, institutional factors such as political, risk, law and order democratic accountability and bureaucratic quality are important determinants of stock market development in the emerging markets. This result suggests that the resolution of political risk can encourage investors' confidence and propel the growth of the stock market. Lastly, the main factors affect the development of capital markets in emerging market countries can also help us understand the determinants of stock market development in Kenya.

The study recommends NSE needs to be developed further to enhance domestic resource mobilization. Various policies and programs that affect stock market development such as regulation of institutional investor and privatization need to be addressed. The policy makers should consider reducing impediments to stock market development by easing restrictions on international capital flows. NSE should play an increasingly educational role and CMA should also change its approach from heavy handed type to more productive, they should see themselves as catalyst in the stock market development.

However, the findings in this study have important policy implications for emerging countries. Firstly, economic growth plays an important role in stock market development .It is important to initiate policies to foster growth and development as countries liberalize their financial systems. Second, the development of a well-developed banking sector is important for stock market development in emerging markets. Developing the banking sector can promote stock market development as demonstrated by the experiences of many Asian countries. Support services from the banking system contribute significantly to the development of the stock markets. However, when stock markets are sufficiently developed they tend to compete with banking sector as shown by the study. Third, domestic investment is an important determinant of stock market development in emerging stock market. To promote stock market development, emerging markets countries can encourage investments by appropriate policies. Fourthly, stock market liquidity has a positive effect on stock market development. Improving stock market liquidity in emerging markets can be another approach of promoting stock market development. Finally, good quality institutions are important determinants of stock market development. Well establish institutions reduce political risk an important factor in investment decisions. The development of good quality institutions such as law and order, efficient bureaucracy and democratic accountability is therefore critical for stock market development.

A number of research recommendations spring from the findings of the study, ranging from awareness of the role of stock market plays in an economy to sound macroeconomic policies. These include: a continuous education program for all parties involved in the

investment environment, Provide Tax Incentives including provision of tax differential in favor of listed companies, establish Good Macroeconomic Policies, ensure the provision of a sound Banking system which will enhance rapid development of the financial market and encourage cross-listings (International) and international integration with other stock markets.

5.3 Limitations of the Study

The periods 2005 to 2010 was used in the study. However, the used period of 6 years is not sufficient to identify all the relevant factors, more period of not less than 20 years to be used in order to provide objective analysis.

Also secondary data was used in the data collection which is subject to limitation. Secondary data has the limitation of: data being out of date, incomplete data, incompatible format for internal comparison and data inaccessible.

The study used only listed companies excluding the non-listed; this limits the study further since unlisted companies can also provide factors affecting the development of the capital markets in emerging economies. The population of the data is limited and does not cover a large population.

The study used regression analysis method only whereas there are other methods to be considered. Using various methods will enhance good interpretation of the factors in consideration.

The cost of buying information from NSE is high. This cost influenced the extend of access to required information for the study objective of this project.

5.4 Suggestions For Further Research

Future research may be directed towards the examination why the NSE has failed to promote capital mobilization in Kenya. This will facilitate the determination of critical

factors contributing to the efficiency and effectiveness of the financial sector in our country.

This study used only listed companies in Nairobi Stock Exchange excluding non-listed companies, further research should be done to incorporate the unlisted companies to establish whether there are other factors affecting stock market development.

The study was also confined to Nairobi Stock Exchange, whereas further study should be done covering other countries in emerging economies in the region e.g. East African Community Countries. A further study should be done to determine the impact towards the regional integration of stock exchanges in the Eastern Africa Region.

Other factors should be studied other than the macroeconomic factors as examined in this study. Behavioral factors should be studied in order to establish whether they affect capital market development. In this study only macroeconomic factors were considered and it indicated that macroeconomic factors contributed to 85% of stock market development leaving 15% as unknown.

Further research should be done to establish the relationship between stock market development versus economic growth. It has been assumed that stock market development is highly correlated with economic growth.

Examine the impact of political risk on stock market development in Kenya. This will examine whether the political environment affect the development of the stock market. It will also recommend policies and measures which will cushion on the same.

Also further research should be done on large companies not listed in the stock market. This is to establish the reasons behind why some companies are not listed in the stock market.

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APPENDICES

APPENDIX I: Data Collected and Used in the Statistics

	GDP at market price in billion Kshs.	Inflation Rate (%)	Per Capita GDP	Share Value Traded in shs.	Domestic credit in Billion shs.	Market Capitalization in Billions Kshs.	Domestic Savings in Billions kshs	Foreign Direct Inflows in Bill.kshs
2005	1415	4.9	40,292.00	36.524	398.491	562	164	2.427
2006	1622	7.3	44,899.00	94.953	446.824	792	215.31	1.056
2007	1828	5.6	49,204.00	88.62	519.457	851	277.186	44.726
2008	2077	17.8	54,371.00	98	652.829	854	298.899	43.067
2009	2273	5.3	57,887.00	38	747.312	832	341.253	3.728
2010	2551.161	4.51	63,184.00	110	1275.35	1167	310.1	17.378

APPENDIX II: DESCRIPTIVE STATISTICS VARIABLES

	V	BSD	IL	SML	MS	PC	IQ	SI
2005	0.3263	0.285	40,292.00	0.0258	4.9	0.0017	0.0873	0.1164
2006	0.4881	0.2754	44,899.00	0.0585	7.3	0.0007	0.1295	0.1327
2007	0.4653	0.284	49,204.00	0.0485	5.6	0.0245	0.1598	0.1516
2008	0.411	0.3142	54,371.00	0.0058	17.8	0.0207	0.0337	0.1439
2009	0.3659	0.3287	57,887.00	0.0057	5.3	0.0016	0.0125	0.1501
2010	0.5184	0.341	63,184.00	0.0488	4.51	0.007	0.17	0.5661

$$V = A(IL) + b(BSD) + c(SML) + e(MS) + F(PC) + g(IQ)$$

Where:

- V Stock Market Development
- BSD Banking Sector Development
- SI Savings and Investments
- SML Stock Market Liquidity
- PC Private Capital Flows
- IL Income Levels
- MS Macroeconomics Stability
- IQ Institutional Quality

APPENDIX III: CORRELATIONS (USING SPSS)

		Stock Market Development	Banking Sector Development	Income levels	Stock market liquidity	Macroeconomic stability	Private Capital Flows	Institutional Quality	Savings and Investments
Stock Market Development	Pearson Correlation	1	.109	.402	.748(*)	-.067	.229	.632	.611
	Sig. (1-tailed)	.	.418	.215	.043	.450	.331	.127	.099
	N	6	6	6	6	6	6	5	6
Banking Sector Development	Pearson Correlation	.109	1	.929(**)	-.405	.048	-.051	-.907(*)	.684
	Sig. (1-tailed)	.418	.	.004	.213	.464	.462	.017	.067
	N	6	6	6	6	6	6	5	6
Income levels	Pearson Correlation	.402	.929(**)	1	-.194	.071	.142	-.629	.712
	Sig. (1-tailed)	.215	.004	.	.356	.447	.394	.128	.056
	N	6	6	6	6	6	6	5	6
Stock market liquidity	Pearson Correlation	.748(*)	-.405	-.194	1	-.479	-.053	.938(**)	.339
	Sig. (1-tailed)	.043	.213	.356	.	.168	.460	.009	.255
	N	6	6	6	6	6	6	5	6
Macroeconomic stability	Pearson Correlation	-.067	.048	.071	-.479	1	.497	-.386	-.279
	Sig. (1-tailed)	.450	.464	.447	.168	.	.158	.260	.296
	N	6	6	6	6	6	6	5	6
Private Capital Flows	Pearson Correlation	.229	-.051	.142	-.053	.497	1	.244	-.067
	Sig. (1-tailed)	.331	.462	.394	.460	.158	.	.346	.449
	N	6	6	6	6	6	6	5	6
Institutional Quality	Pearson Correlation	.632	-.907(*)	-.629	.938(**)	-.386	.244	1	-.123
	Sig. (1-tailed)	.127	.017	.128	.009	.260	.346	.	.422
	N	5	5	5	5	5	5	5	5
Savings and Investments	Pearson Correlation	.611	.684	.712	.339	-.279	-.067	-.123	1
	Sig. (1-tailed)	.099	.067	.056	.255	.296	.449	.422	.
	N	6	6	6	6	6	6	5	6

* Correlation is significant at the 0.05 level (1-tailed).

** Correlation is significant at the 0.01 level (1-tailed)

APPENDIX IV: LISTED COMPANIES

AGRICULTURAL

1. Kakuzi Ltd
Rea Vipingo Plantations Ltd
2. Sasini Ltd

COMMERCIAL AND SERVICES

1. Car and General (K) Ltd
2. CMC Holdings Ltd
3. Olympia Capital Holdings Ltd
4. Kenya Airways Ltd
5. Marshalls (E.A) Ltd
6. Nation Media Group
7. Standard Group Ltd
8. TPS Eastern Africa (Serena) Ltd
9. Scangroup Ltd
10. Access Kenya Group Ltd
11. Safaricom Ltd
12. Uchumi Supermarket Ltd
13. Hutchings Biemer Ltd

FINANCE AND INVESTMENT

1. Barclays Bank Ltd
2. CFC Stanbic Holdings Ltd
3. Diamond Trust Bank Kenya Ltd
4. Housing Finance Col Ltd
5. Centum Investment Co. Ltd
6. Jubilee Holdings Ltd
7. Kenya Commercial Bank Ltd
8. National Bank of Kenya Ltd

9. NIC Bank Ltd
10. Pan Africa Insurance Holdings Ltd
11. Standard Chartered Bank Ltd
12. Equity Bank Ltd
13. Kenya Re-Insurance Corporation Ltd
14. The Co-operative Bank of Kenya Ltd
15. CFC Insurance Holdings

INDUSTRIAL AND ALLIED

1. Athi River Mining
2. B.O.C Kenya Ltd
3. Bamburi Cement Ltd
4. British American Tobacco Kenya Ltd
5. Carbacid Investments Ltd
6. Crown Berger Ltd
7. E.A Cables Ltd
8. E.A Portland Cement Ltd
9. East African Breweries Ltd
10. Sameer Africa Ltd
11. Kenol Kobil Ltd
12. Mumias Sugar Co. Ltd
13. Total Kenya Ltd
14. Unga Group Ltd
15. KenGen Ltd
16. Everyday East Africa Ltd

ALTERNATIVE INVESTMENT MARKET SEGMENT

1. City Trust Ltd
2. Eaagads Ltd
3. Express Ltd
4. Kapchorua Tea Co. Ltd

5. Limuru Tea Co. Ltd
6. Williamson Tea Kenya Ltd
7. Kenya Orchards Ltd
8. A. Baumann Co. Ltd