

**THE EFFECT OF FOREIGN DIRECT INVESTMENT ON STOCK
MARKET DEVELOPMENT IN KENYA**

BY

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DECLARATION

This research project is my original work and has not been presented for award in any other University.

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DEDICATION

I humbly dedicate this work to the Almighty God for enabling me to accomplish. To my Dad and Mum, my Husband to whom I owe my inspiration to achieve.

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ABBREVIATIONS AND ACRONYMS

ATS	Automated Trading System
CBK	Central Bank of Kenya
CMA	Capital Markets Authority
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
MNC	Multi-National Corporation
NASI	Nairobi All Share Index
NSE	Nairobi Securities Exchange
OLI	Ownership, Location and Internalization
TVT	Total Value Traded
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
VECM	Vector Error Correction Model

ABSTRACT

Theoretically, there has been a prove of a triangular causal association between the FDI and the development of the stock market whereby FDI inflows is considered a wellspring of progress in terms of technology and decreasing unemployment in most countries that are still developing. This will then increase the production of goods and services which ultimately result to increased GDP. Therefore, increased GDP means the growth of economy which has a positive effect to the development of the stock market and the rise of share prices (Adam & Tweneboah, 2009). This study sought to determine the effect of foreign direct investment inflows on stock market development in Kenya. The independent variable was FDI as measured by annual FDI inflows into the country as a percentage of GDP. The control variables were economic growth as measured by GDP on an annual basis, interest rate as measured by CBK annual lending rate, inflation rates as measured by annual CPI and exchange rates as measured by annual exchange rate between KSH and USD. Stock market development was the dependent variable which the study sought to explain and it was measured by market capitalization as a percentage of GDP. Secondary data was collected for a period of 30 years (1987 to 2016) on an annual basis. The study employed a descriptive research design and a multiple linear regression model was used to analyze the relationship between the variables. Statistical package for social sciences version 21 was used for data analysis purposes. The results of the study produced R-square value of 0.357 which means that about 35.7 percent of the variation in stock market development in Kenya can be explained by the five selected independent variables while 64.3 percent in the variation was associated with other factors not covered in this research. The study also found that the independent variables had a strong correlation with dividend payout ratio. ANOVA results show that the F statistic was significant. Therefore the model was fit to explain stock market development in Kenya. The results further revealed that individually, FDI inflows, economic growth, interest rates, exchange rates and inflation were statistically insignificant determinants of stock market development in Kenya. This study recommended that policy makers should come up with policies that will contribute to fastening the development of the Kenyan stock market as it is believed to have a direct relationship with economic growth in the country.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Foreign Direct Investment (FDI) not only offers countries with much-needed resources for domestic investment but also creates job opportunities, help transfer managerial expertise and technology all contributing to the advancement of the economy. Most governments have appreciated the critical role the FDI plays and have established various ways of attracting it. In theoretical literature, the purpose of FDI is that of a carrier of foreign technology that can promote economic growth (Jones, 1999). The most outstanding motivation of FDI has been resource seeking (Dunning, 2003). Economists consider FDI as an essential component of economic progression. The need for better economies, technological advancement, economic growth, poverty eradication and better standards of living has seen Africa's nations endeavor to get Foreign Direct Investments pumped into their economies to help accomplish these (Mishkin & Eakins, 2009).

This study was guided by several theories such as the open system theory, internalization theory and foreign direct investment dependency theory that tried to explain the relationships between foreign direct investments and stock market development. These theories examine the ways through which FDI contribute to economic growth their respective countries. These theories demonstrate the extent to which FDI contribute to technological change enhancement through acquisition of new knowledge and capital goods, i.e. the technological diffusion process. There was a lot of speculation about the contribution of FDI in the recipient countries with many arguing that it is based on the

existing circumstances in those respective countries. The theories relate FDI with economic growth of a country which in return leads to stock market development.

The financial sector greatly contributes to economic growth since it increases direct foreign direct investment. Studies have shown that well organized and run stock markets increase investment, economic growth and efficiency. Kenya's stock market has been defined as both shallow and narrow. There has been less than 1% growth financing in the stock market despite the aim to achieve an annual economic growth of 10% by 2030 with a 30% investment rate which is to be mainly financed by use of domestic resources. A lot of initiatives such as the institutional development of stock market was established so as to put more focus on the stock market. These efforts are assumed to facilitate adequate resources mobilization and efficient allocation so as to attain growth objectives (Ngugi, Amanja & Maana, 2010).

1.1.1 Foreign Direct Investment

Foreign direct investment can be described as an investment made in a corporation by an interested party from another country for which the foreign investor has control over the acquired company. This transaction brings about a long term association between the host and home country investors (Olson, 2008). UNCTAD (2002) describes three different types of FDI. These are: reinvested earnings, equity capital and other capital which mainly consist of intercompany loans. FDI's create new job opportunities as upon setting of the business, recruitment and training of the locals in the host country is undertaken transferring skills and technological know-how as well as providing jobs. According to Ismaila and Imoughele (2010), FDI represent long term commitments to the host country. It is a preferred form of investment because it has no obligations to the host country.

FDI is important in adopting new technologies, skills and managerial capabilities in the different sectors of the economy which are traditionally difficult to raise through use of domestic savings, and if not, there would be difficulty in importation of the technology from abroad. This would be compounded by the fact that transferring technology to firms with little experience is risky and they will find difficulty in the use of it and it comes at a great cost (Olson, 2008). FDI is responsible for many externalities that come in the form of benefits to the home country that are not responsible for generating incomes to the host country. FDI is important for developing countries as it avails resources necessary to optimize the level of economic development (Ismaila & Imoughele, 2010). The reason for this is that their economies face challenges such as low domestic savings, revenues, low levels of productivity and low foreign exchange earnings.

A country's appeal for FDI is affected by changes in restrictions that include removal of government barriers to trade as well as privatization of government agencies. The country's economic growth potential influences the appeal for the country for FDI since countries with higher economic growth potential make it easier for firms to take advantage of that growth by setting up business there. Tax rates and Exchange rates influence a country's appeal for FDI. Low tax rates on corporate profits encourage Foreign Direct Investment while firms prefer to direct FDI to countries where the local currency is expected to appreciate against their own currency (Mishkin & Eakins, 2009).

1.1.2 Stock Market Development

A stock market is a market where individuals and entities trade shares at prices that reflect demand and supply and low transaction costs (Yartey, 2008). Markets function through placement of various interested sellers and buyers, including firms, households,

private firms and government agencies in one location at a given time so that trade can take place. Stock market development involves the establishment of institutions, markets and instruments that supports investments and growth process. Stock market development enhances the capability of the stock market to act efficiently as an intermediary. A highly liquid stock market is able to accommodate large and varied issuance of stocks with minimum price effect (Adam & Tweneboah, 2009).

Stock market development and efficiency is influenced by a number of factors and according to Garcia and Liu (1999), it is a multifaceted concept which is measured by a number of factors namely, the stock market capitalization, volatility, liquidity, concentration, integrating with world capital markets and compliance with legal rules with regard to supervision and regulations in the market. The main measures of stock market development that was looked at in this paper were stock market liquidity and market capitalization. Market capitalization or stock market capitalization or is the sum of market value of the outstanding shares of a company. Market capitalization is therefore the total value of domestic stocks. Stock market capitalization is therefore used in the measurement of the stock market size and is among the main indicators of growth and development in stock market (Levine, 2003).

The liquidity of the stock market can was used to measure stock market development and it refers to the simplicity with which investors can buy and sell their stocks or share holdings on the stock exchange or on the stock market. It is usually measured in terms of the total value traded of the shares to GDP and the stock market turnover ratio to GDP. The ratio of total value of shares (domestic) traded to GDP is used to measure the value of equities traded relative to the size of an economy; it doesn't measure the costs and

uncertainties of trading the securities at the prices posted. There is one shortfall with this measure as proxy to stock market liquidity in that when investors anticipate large profits in firms, their share prices will rise. This rise in price increased the stock value traded and thereby boosting the total value traded to GDP (TVT/GDP) ratio (Levine, 2003). This therefore means that the liquidity indicator has increased without an increase in the number of transaction or even might increase with the number of transaction falling. The solution to this problem is to add the market capitalization to GDP ratio in the regression to try and look at the extent of the price effect. In essence the price effect affect both the total value traded and the market capitalization but the only variable that is directly related to the pricing effect is the value traded ratio (Levine, 2003).

1.1.3 Foreign Direct Investment and Stock Market Development

Theoretically, there has been a prove of a triangular causal association between the FDI and the development of the stock market whereby FDI inflows is considered a wellspring of progress in terms of technology and decreasing unemployment in most countries that are still developing. This will then increase the production of goods and services which ultimately result to increased GDP. Therefore, increased GDP means the growth of economy which has a positive effect to the development of the stock market and the rise of share prices (Adam & Tweneboah, 2009). The lasting effect of FDI inflows on both the increased investor's involvement in stock exchange and the domestic capital markets' development were earlier confirmed by Errunza (1983). Yartey (2008) argued that the variety of investors and trading volume is increased by the greater confidence in the domestic capital market which is promoted by both institutional and regulatory reforms which are encouraged by FDI. Batten and Vo (2009) confirmed a linkage between FDI

and stock market development whereby FDI possessed a stronger positive effect on the economic growth in countries that had higher levels in the development of the stock market.

FDI has various positive effects which may be seen via the positive influence of the economy. This results in economic growth. Other effects are seen through the transfer of better technology in the market which assist developing countries, the increase in knowhow and also indirectly, capital markets. The studies surrounding this reveal that the justification for the increased long term association includes the underlying presumption that the existence of FDI inflows results in spillover effects on the local stock market and therefore motivates the law makers to put into effect market-friendly regulations in their various countries, which encourage stock trading (Rogoff, 2005).

Adam and Tweneboah (2009) stated that in developing economies, following financial and political transformation, FDI has grown rapidly. Most countries have embarked on a number of practices so as to increase their share of FDI flows. Such activities include relaxing FDI restrictions, macro stability strengthening, domestic financial report, liberalizing capital account, and instituting tax incentives and subsidies (Oseni & Enilolobo, 2011). In addition, there is establishment and development of stock markets so as to direct funds towards viable projects for investments. Foreign investors have become major players in the emerging and developing stock markets by either buying already existing equity or disposing the same in capital markets though the resultant impact on the development of these emerging stock markets especially in the developing countries has been ignored. The foreign direct investment affect price of companies shares either

positively or negatively as it increases the supply and demand for the shares (Al-Halalmeh & Sayah, 2010).

1.1.4 Foreign Direct Investment and Stock Market Development in Kenya

FDI in Kenya is covered in all the sectors, be it in the banking, automobile or telecommunications sector. Various multinational companies have set up operations in Kenya and they include Car and General, Coca-Cola as well as communication firms like Airtel. In every aspect of our lives, FDI is felt that is in the goods and services that we use. FDIs are not in isolation as they have provided jobs and with them, technical knowledge as they train their Kenyan employees to maintain the standards that are there in their other investments all over the world. They are the major source of foreign exchange to the country. FDI has not been consistent over the years with some periods recording low inflows. In the 1980s and 1990s, FDI inflow was low due to deterioration in economic performance as well as rising problems of poor infrastructure and the high cost of living greatly impacted negatively on FDI inflows in Kenya (KPMG, 2012). In total, Kenya has more than 200 multinational companies across the sectors with Britain, USA, Germany, South Africa, Netherlands, Switzerland, China and India being the main traditional sources of FDI (Kinuthia, 2010).

Kenya serves as the East African business hub for many international businesses. This translates to a dependence of FDI for capital inflow that in turn reflects on provision of jobs and an economy that is helped to grow by these foreign investments. Kenya's FDI average percentage growth between 2007 and 2015 was forty percent (40%) with the inflows primarily channeled into retail and consumer products, technology, media, telecommunications, minerals, oil and natural gas sector mainly from the UK, USA and

India (Ernest & Young,2015). In 2015, FDI inflows stood at USD 1076.9 million (KES 105.29 billion), up from USD 670 million (KES 65.51 billion) a year earlier which is a sixty per cent (60%) increase. This capital mainly went to oil, gas and the manufacturing industries (UNCTAD, 2015).

The Nairobi securities exchange NSE has been one of the best performing and top stock market indices in Africa in recent history. Trading in Kenya started in the 1920s and there was no formal market as there were part time brokers that comprised of accountants and real estate agents. Officially the NSE was established in 1954 it has since developed and evolved from once being called the Nairobi Stock Exchange to now the Nairobi Securities exchange to incorporate other securities such as derivatives and debt instruments. The NSE has also seen a change in its regulatory policies from the situation before independence where there was little or no regulation on the trading that took place. There has been the formation of the capital markets authority in the 1990s, the CMA was set up with the aim of creating investor incentives for long term investments (The NSE website).

The NSE All Share Index was rated the best stock exchange in the world in 1994 in terms of performance with gains of up to 179% in dollar terms in that year. This shows significant growth of the Kenyan stock market. Other various developments on the NSE include the increase of the number of companies that have been listed, the creation of the NSE 20-Share index, the FTSE-NSE 25 index and also the introduction of the automated trading system ATS in 2006. The various strides that have been done have resulted in the NSE being transformed to become one of the top performing bourses on the African continent.

1.2 Research Problem

The stock market is a major section of any given economy and its financial structures. It is considered to be a major financing source for new entities and ventures based on the profitability level expected. Further, for a country to increase the level of savings and investment therefore resulting to a growth in the economy the securities market is considered essential and its role is significant in any country or economy. It is considered to be a replica around the world of the economic strength of most countries. Studies by various scholars indicate the positive role of the stock market which results to economic growth in various countries (Levine & Zervos, 2005). Some factors that result in the securities market development include the political stability of a country, the exchange rate, economic liberalization and foreign direct investment (Adam & Anokye, 2008). The importance of the development of stock market in developing economies as a result of FDI is considered to be very strong. Research from studies shows a triangular causal relationship in; economic growth stimulation by FDI; positive effects are observed as a result of economic growth and the ultimate effect is the development of the stock market promoted by FDI (Adam & Anokye, 2008).

In the Kenyan context, the World Bank issued the Doing Business 2017 report which showed that Kenya was ranked position 92nd out of 189 countries in terms of FDI inflows. From 2016, this was a 16 gain of places and therefore an improvement. The reason behind this was the fact that Kenya simplified its procedures followed in creating business and ownership transfer and improvement of electricity and credit access. Kenya has also embarked on several activities in order to enhance a positive influence on FDI inflows in the coming years such as relaxing conditions for obtaining business licenses

and public-private partnership development which is a strategy in the Vision 2030. In addition, Kenya has also opened most sectors to foreign investment such as the telecommunications sector which has mostly attracted FDI due to the fiber optics that were introduced in 2009-2010.

Local researches done on the area of stock market include; Seile (2009) who did a study on the association between stock market and specific macroeconomic variables in the NSE such as inflation, GDP, Treasury and interest bill rates. The findings revealed that market share index had a positive correlation with Treasury bill rate, gross domestic product and inflation rate whereas it had a negative correlation with interest rate but the study did not focus on the effect of FDI on the volatility of securities. Dinga (2009) and Kimotho (2010) researched on the connection between FDI and economic growth in Kenya and concluded that FDI's influence economic growth level. Omoke (2010) and Ndung'u (2011) also studied the link between the growth of economy and Kenya's stock market development and the findings was a positive connection between the two variables. Philbert (2012) has also studied the nexus between FDI, financial market development and the growth of economy in Kenya and concluded that financial markets influences the economic growth.

Most of the existing empirical evidence has studied the influence of different variables on the development of stock market while still others have examined the effect of development of stock market on economic growth. However, there exist few studies on the influence of foreign direct investment on stock market development in Kenya. Thus, this study intends to fill this research gap by addressing the question; what is the effect of foreign direct investment on stock market development in Kenya?

1.3 Research Objectives

This study seeks to determine the effect of foreign direct investments on stock market development in Kenya.

1.4 Value of the Study

The study findings are hoped to be of benefit to policy makers in developing investment strategy policies and developing the necessary institutional framework required to market Kenya as an ideal foreign investment destination. Also, it will help them in coming up with policies that ensures consistent development of the stock market and thus protecting the profit margins and net present values of current and potential investors alike.

The finding of the study has formed a future reference to researchers, scholars and students who may aspire to take out research on the same or correlated field. The study will be helpful to scholars and researchers in identification of further areas of research on other related studies by highlighting related topics that require further research and reviewing the empirical literature to establish study gaps.

The study findings will inform the policy direction taken by the Capital Markets Authority and other stakeholders through issuance of regulations that touches on the market initiatives that would ultimately result in increased stock market development in Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the theoretical framework applied for the study and reviews previous studies done on foreign direct investments and stock market development. It contains the theoretical framework, determinants of stock market development, empirical review, conceptual framework and summary of literature review.

2.2 Theoretical Framework

The concept of foreign direct investment and its relationship with stock market development is explained by a number of theories. In this study, three theories have been discussed which include; open system theory, Internalization theory and FDI dependency theory.

2.2.1 Open System Theory

Open system theory by Katz and Kahn (1978) is of the assumption that the organization is environmental serving and environment dependent, that is to say, it obtains its resources from the environment and supplies its products to the environment. On the other hand, the environment presents threats and opportunities from the environment such as technology, innovation, as well as competition to an organization. For an organization to survive it has to keep up with the environment which is constantly changing.

As a result of the changing nature of the business environment, businesses are constantly changing how they do business to ensure they remain relevant in the business world. An influx of MNCs into the country impacts on the environment in which businesses in that

industry are operating as these MNCs come up with new ways of doing business as well as sourcing funds. In the context of our study, MNCs have been seen to employ the use of social media as an efficient means of undertaking their marketing activities and diverse means of funding their venture such as group funding and bonds among others (Chernysheva, 2011). When they expand their operations into a developing host country, they have these advantages over local firms; as a result, local firms are forced to be equally innovative to ensure they do not lose their market share to the foreign firms.

2.2.2 Internalization Theory

This theory was advanced by Casson and Buckley in 1976. Further development of the theory was by Hennart (1982) and benefits from additional works by Casson (1983). The theory explains the growth of multinational corporations and their motivations. It demonstrates that multinational corporations organize their internal activities to achieve specific advantage and exploit them to enhance its competitiveness. According to Hymer (1976), FDI will occur only when the exploitation of firm specific advantage supersedes the relative cost of investing abroad. In summary, he implies that FDI occurs in imperfect markets and it's simply a strategy decision at firm level rather than a financial decision of the capital market.

Casson and Buckley (1976) argue that an FDI is only attractive if the Ownership, Location and Internalization (OLI) conditions are met. First, the multinational must have an ownership advantage compared to the local firm's ownership. This may be in form of the multinational's specific organizational or technological knowledge. The government policies' likely on the benefits of investing in a certain host country is also vital. In some cases the host government may pose regulations concerning the nature of foreign

ownership. Such restrictions in effect reduce FDI inward inflows which will be accompanied by technology. Secondly, it must be advantageous for the multinational companies as well as other investors to produce in the host country if they can benefit from some comparative locational advantage. Finally, it should be suitable to execute the activities within the host countries, as opposed to leasing or buying them from other firms.

2.2.3 Foreign Direct Investment Dependency Theory

Prebisch (1950) guided the development of this theory whereby it explained that FDI does not have a positive contribution to the economy of the host country but rather have a negative effect on such economy. This meant that there exist a dependency relationship between the developed economy and developing country (Zafar, Ahmed & Khan, 2016). The reason behind this was that the developing countries export raw goods to the developed countries that then manufacture the good into finished goods and then sell them back to the developing country. The process of value addition increases the cost unlike for raw goods therefore the developing country would never get enough earnings from their exports earnings to cater for the imports (Ferraro, 2008). In addition, FDI is a form of entry of developed economies into developing countries in which it brings in complicated and superior equipment therefore outperforming local industries by destroying domestic micro businesses through use of higher technology and greater advertising skills. FDI is thought to contribute significantly to the balance of payment problems of most advancing countries as the profit earned by the multinationals are usually returned to the investing economy. These activities of the foreign investors

usually create imbalance in the developing country therefore affecting the chance for economic growth (Odo, Anoke, Nwachukwu & Agbi, 2016).

The implication of this theory to the association between FDI and the development of the stock market is that a negative link between the two exists. This is because the higher levels of technologies introduced into the developing country bring about labor savings which influence the demand for domestic labor and then prolongs the level of poverty thereby reducing savings making it difficult to develop stock market in terms of liquidity and size.

2.3 Determinants of Stock Market Development

Several factors determine the development of stock market in a country. The main factors include foreign direct investments, stock market liquidity, economic interest rates, growth, inflation rates and exchange rates.

2.3.1 Foreign Direct Investment

Theoretically, there has been a prove of a triangular causal association between the FDI and the improvement of the stock market whereby FDI inflows is considered a wellspring of progress in terms of technology and decreasing unemployment in most countries that are still developing. This will then increase the production of goods and services that ultimately result to increased GDP. Therefore, increased GDP means the growth of economy, which positively influences stock market development, and the rise of share prices (Adam & Tweneboah, 2009). The lasting effect of FDI inflows on both the increased investor's involvement in stock exchange and the development of the domestic capital market were earlier confirmed by Errunza (1983). Yartey (2008) declared that the

number of investors and trading volume is increased by the more confidence in domestic capital market, which is promoted by both institutional and regulatory reforms that are encouraged by FDI. Batten and Vo (2009) confirmed a linkage between FDI and the development of stock market whereby FDI possessed a stronger positive effect on the economic growth especially in countries that exhibited higher levels of development in stock market.

2.3.2 Stock Market Liquidity

The term liquidity is defined as the speed and ease through which securities can be bought or sold by agents. Liquidity forms the most vital service offered by the stock market (Miller 1991). Many projects through which high levels of return are expected need long-run capital commitment which come with bears liquidity risks and high chances of defaulting which investors are reluctant to take. Thus less investment is likely to occur without liquid stock markets may occur to projects with high returns. Liquid stock markets also make it possible for investors to quickly and cheaply alter their portfolios which make investment less risky and give room for more profitable long term investments (Levine, 1991). Thus more liquid stock markets allow for channeling of more savings through stock markets whose output will be higher market capitalization. Mishkin (2001) asserted liberalization in financial management brings about transparency accountability and transparency which reduces moral hazard and adverse selection. These advancements reduce borrowing cost of stock markets which lead to the increment of the stock market size and liquidity.

2.3.3 Economic Growth

GDP is the most used measurement of economic growth. A growing economy exhibits positive GDP which raises demand for loans (Osoro & Ogeto, 2014). Any rise in economic output may raise expected cash flows and, hence, trigger a rise in price of shares, with the reverse impact during recession is justified (Kirui et al., 2014). Existing empirical evidence indicate that the financial systems of advanced nations such as stock market are more efficient (Beck et al., 2003). Stock market development is also positively related to economic stability and monetary and fiscal policies. Countries with higher income have more advanced stock markets compared to countries with low income (Cull, 1998).

Investors are mainly concerned with GDP reports since the overall economic health could be established through its measurement. The long run implication of healthy economic growth is higher corporate profits and improvement of stock market performance while the short term implication is unpredictable market trends even during positive economic growth seasons (Beck et al., 2003).

2.3.4 Interest Rates

Thomas (2006) argues that when the borrowing cost is put as a percentage each year, it is referred to as interest rate. This is one of the key variables in economies that play an important purpose in consumer's decision to purchase goods or services in a particular country. The significant factors involved are normally the interest adjusted for expected inflation and the real interest rate. Investment and consumption expenditures and the criteria for wealth redistribution between lenders and borrowers are influenced by real interest rates. Higher real interest rates benefit lenders at the borrowers' expense. Lower

real interest rates imply more benefits for borrowers which will mean lesser earnings for the lenders (Thomas, 2006).

In macroeconomics, the rates of interests are the most crucial variables and are ranked highly even in the application of finance in the real world. Most economic phenomena's are influence by the rates of interest changes which include amount of expenditure on the investments in equipment's, the amount of expenditures by the consumers, technology advancement and the wealth redistribution criteria between borrowers and lenders. Key financial assets' prices such as bonds, stocks and foreign currencies are influenced by the rates of interest (Thomas, 2006).

2.3.5 Exchange Rates

The rate of exchange is the price where one particular country's exchange medium could be traded for a different country's currency. The rate of exchange determines the price of a country's product in other countries and the domestic price of goods brought in the country from abroad. This is one of the essential roles played by the exchange rate. In the modern day, the floating system of rates of exchange is applied which ensures that the rates change through out the day (Thomas, 2006).

Exchange rate is referred to as the value of one particular currency expressed in the terms of another different currency in a way that they appear different (Samuelson & Nordhaus, 2010). The importance of the rate of exchange framework is used in the mechanism of the monetary transmission. Real exchange rates have an effect on the overall demand levels in the transfer of monetary policies in the economy. It has an effect on the foreign demand for domestic and foreign goods and therefore the relative development in the stock market (Ncube & Ndou, 2011).

2.3.6 Inflation

This is the decline in the real value for money or decline in the firms' purchasing power (Tucker, 2007). Increase in normal price forces the purchasing units to go for fewer commodities. Inflation has diverse economic implications which could either be negative or positive. The implication of the negative effects is however higher since it brings about a decline in the real value for money and other variables which lead to future uncertainties. High inflation rates discourage investment and savings and lead to shortages in consumer goods as a result of hoarding which lead to price increment (Wanjala, 2014).

2.4 Empirical Review

There are numerous empirical studies both locally and internationally to support the linkage of FDI and the development stock market, however, majority of the previous studies did not look into the link between FDI and the development of the stock market especially in upcoming economic development.

2.4.1 Global Studies

Alfaro et al, (2004) did a study on the links among foreign direct investment, economic growth and financial markets. They investigated where there was more efficient utilization of FDI by countries more advanced financial systems. An empirical analysis was performed by use of cross country data between the period of 1975 – 1995 and it revealed that FDI greatly contribute to economic growth. The study however demonstrated more significant gains from FDI by countries with well-developed financial markets. The outcome was similar to other measures of development in financial market, inclusion of other economic growth determinants and consideration of endogeneity.

Sobrabian and Kholdy (2005) investigated different associations between financial the economic growth and FDI. The study noted that countries with initial low GDP per capita economic growth to be financial development stimulus; the relationship between cause and effect however is different for countries with higher GDP. The study also found two points of perspective between FDI and financial markets in countries with financial markets that are more developed and higher GDP per capita. It was however concluded that FDI do not lead to inducement of economic growth.

Adam and Tweneboah (2009) used multivariate analysis and accounting of innovation method in examining the effect of FDI on development Ghana's stock market. The data was based on four quarters beginning from 1991 to 2006 where the co-integration analysis showed a long-run connection between the two variables. There was also a positive significant influence on stock market development. Also by use of variance decomposition and impulse responses from vector error correction model (VECM), Ghana's stock market development in was influenced significantly by the increasing FDI. Kenya, just like Ghana has been experiencing increased amount of FDI inflows hence it is of great importance to explore the effect of FDI on the development of financial market especially stock market, which has received little or no attention in Kenya.

Hsu and Wu (2009) studied the role of financial intermediations and effects direct foreign investment on economic growth by use of cross-country data between 1975 and 2005. The study applied new statistical techniques to avoid the problem of endogeneity and noted some biased brought about by that weak instruments in the estimation of the effects of FDI on output through utilization of local financial markets. Fully robust tests were used in this issue's re-evaluation. The study considered the Fuller methods and limited

information maximum likelihood (LIML) to provide more reliable points of estimates and weak instruments inferences. The empirical results showed that economies exhibiting financial markets that are well developed were not necessary to gain more from FDI to improve their rate of economic growth.

Adeniyi (2012) studied the causal association of FDI on growth economy in Gambia, Nigeria, Cote' d'Ivoire, Ghana, and Sierra Leone by use of the Granger causality tests in a VEC setting to test the financial development between the period of 1970-2005 using a trivariate framework. The results were in support of the view that the financial sophistication level is of great importance to direct foreign investment to bring about economic growth in Gambia, Sierra Leone and Ghana, with regard to the used financial indicator. There was however no evidence of both short and long-run causal flow as a result of FDI to growth in Nigeria.

Shahbaz, Lean and Kalim (2013) did a study to investigate the macroeconomic variables with key concern on FDI which impact the Pakistan's stock market development. Their concern was the substitution or complementary role of FDI to the development of stock market. They employed annual data for a period ranging from 1971 to 2006. In their analysis, they applied co-integration and found out that FDI plays a complementary role to stock market development in Pakistan in that there was a significant positive association between FDI and stock market development in the long run. From the studies that have been done in Pakistan with regard to factors that affect stock market development, it is evidenced that most studies focused on macroeconomic factors but did not consider institutional factors like regulatory and legal framework and political stability.

2.4.2 Local Studies

Dinga (2009) investigated the effect of FDI inflows on the growth of economy in Kenya for a period from 1990 to 2007. In the multiple regression model, the dependent variable was GDP per capita while the independent variables were the FDI inflows, capital formation, and labor. Using SPSS, the findings were that FDI had a weak influence on the growth of economy. This could be explained by low gross capital formation that was evidenced to come from FDI. In addition, it can be because of the small amounts of capital inflows into Kenya. Therefore, the government should and is coming up with strategies that attract FDI so as to benefit from the inflows. This study focused on how the economic growth is influenced by FDI generally, but it is also important to determine the influence of the inflows to the financial markets especially the stock market. The study used a short period that could have not shown the relationship between the variables clearly hence, there is need to consider a longer period.

Kim (2011) studied the correlation between foreign direct investments and economic growth in Kenya between the years 2000 - 2009 in order to establish whether changes in variables influence each other. The results revealed that direct foreign investments significantly contribute to the current economic growth level. The means that Kenya's economic growth could be enhanced through effective management of donated funds and strategic expansion of investment plans.

Ndung'u (2011) sort to explore the extent of the connection of the development of stock market to economic growth of Kenya by analyzing data for a period of ten years from the second quarter of 2000 to the first quarter of 2010. In the study, a regression model was used complemented by a granger causality test where two stock market development

measurers, which are liquidity and size of the market, were regressed against economic growth rate. The analysis evidence a positive association between growth of economy and development of stock market in Kenya. The nature of the association was from the development of stock market to economic growth as indicated by the granger causality test. The study focused on the determinants of economic growth in Kenya by concentrating on stock market development as one of the factors. It is therefore important to establish the variables that cause stock market development such as foreign capital inflows. One of the shortcomings of this study was that the control variables used did not picture clearly the relationship between economic growth and stock market development.

Using FDI and GDP data between 2004 and 2013 Muchira (2013) established that there is a positive relationship between Foreign Direct investment and GDP in Kenya with Foreign Direct investment encouraging higher enrolment in tertiary institute hence a growth in human capital, creating employment by lowering unemployment rate and alleviating poverty and transferring technology which enhances productivity of local firms. Following these benefits Muchira (2013) recommended policies that encourage Foreign Direct investment inflow through infrastructure development, opening up of economies, fighting corruption, doing away with insecurity and managing Foreign Direct investment to prevent any negative effects from Foreign Direct investment.

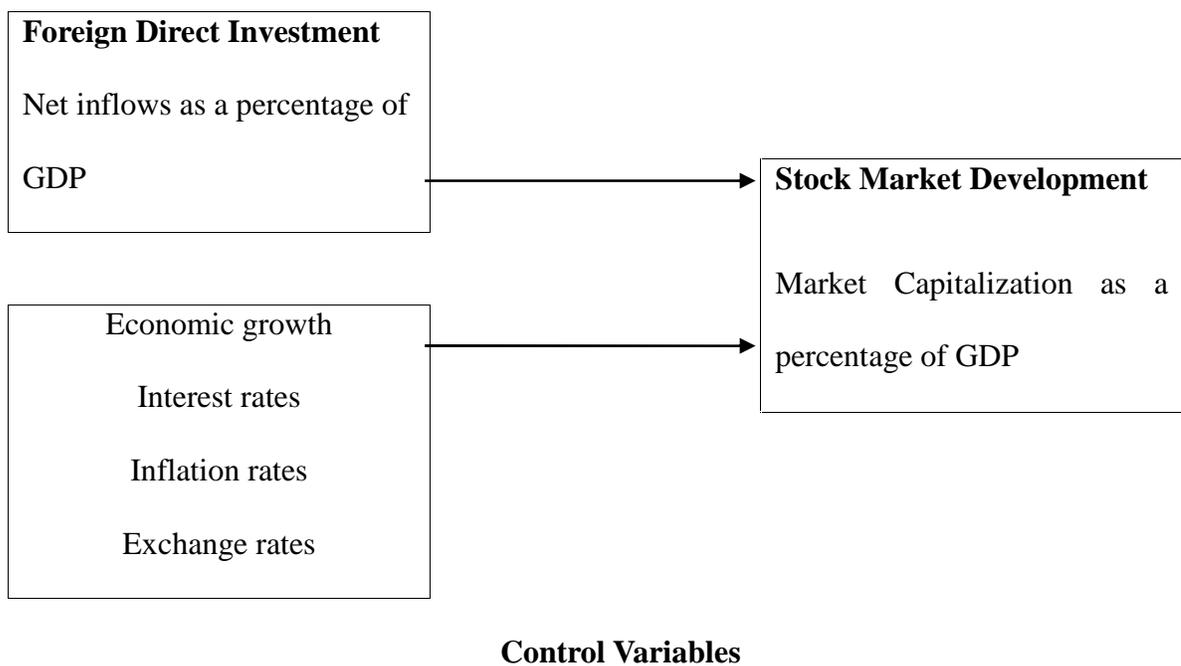
Nyaga (2013) using FDI and GDP data between 1982 and 2012 found that there is a positive relationship between Foreign Direct investment and economic growth in Kenya. He established that Foreign Direct investment flow lead to increased imports than exports, investment than saving which lead to higher wages and productivity in labor. Also he associated Foreign Direct investment with employment creation thereby

alleviating poverty in the host nation and stimulating productivity of local firms through transfer of technology and expertise. The study recommended research on the effect of Foreign Direct investment on specific sectors of the economy.

2.5 Conceptual Framework

Independent Variables

Dependent Variable



Source: Author (2017)

Figure 2.1: The Conceptual Model

The conceptual framework gives a portrayal of how the factors identified are related to each other. The factors characterized here are foreign direct investments and stock market returns. The independent variable is foreign direct investment as measured by net inflows as a percentage of GDP. The control variables are economic growth as measured by GDP per capita, interest rates as measured by CBK quarterly lending rate, inflation rates as

measured by quarterly CPI and exchange rates as measured by quarterly exchange rate between KSH/USD. Stock market development is the dependent variable which the study seeks to explain and it will be measured by market capitalization as a percentage of GDP.

2.6 Summary of the Literature Review

This section of this study explored the various theories advanced for foreign direct investments including the open system theory, internalization theory and foreign direct investment dependency theory. This chapter further delineates the various determinants of stock market development to include foreign direct investments, stock market liquidity, interest rates, economic growth, inflation rates and exchange rates. The chapter also presented empirical studies of the research done by other scholars on the topical area of foreign direct investment and development of stock market both at the local and global scene.

The literature review reveals evidence of substantial research on foreign direct investment done in the past but falls short in addressing the effects of foreign direct investments on the development of stock market in Kenya. Moreover, findings from the studies reveal contradictions and inconsistency depending on the markets and analytical model adopted. Local studies done are not conclusive in their findings and it is this gap that the current study intends to fill.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes methods of research applied to objectively establish the effect of foreign direct investment on the development of stock market in Kenya. It also shows the research design, the population of study, data collection criteria and data analysis.

3.2 Research Design

Research design is defined as a blue print of those procedures, which are adopted by a researcher for testing the relationship between dependent variables and independent variables (Khan, 2008). Descriptive design was used for the study. A descriptive study involves a description of all the elements of the population. It allows estimates of a part of a population that has these characteristics. Identifying associations among various variables is possible, to establish whether the variables are independent or dependent.

3.3 Data Specification

The data obtained for the study was made up of all FDI remittances into Kenya per year, annual GDP per capita, average interest rate per year, and average exchange rate per year, inflation rate per year and market capitalization per year for the period between January 1987 and December 2016.

3.4 Data Collection

KNBS publications, World Bank database as well as from the CBK website were the sources of secondary data for this study. The quantitative data collected included total FDI remittances as a percentage of GDP into Kenya from 1987 to 2016 collected on an

annual basis from World Bank database. Data on exchange rates and interest rates was collected from the CBK website for every year from 1987 to 2016. Data on inflation was the CPI while data on economic growth was the Kenya's GDP per capita, both collected quarterly from 1987 to 2016 at the KNBS. The end result was annual information detailing the independent variables and dependent variable for the last 20 years.

3.5 Diagnostic Tests

Linearity show that two variables X and Y are related by a mathematical equation $Y=c+bX$ where c is a constant number. The linearity test was obtained through the F-statistic in ANOVA. Normality is a test for the assumption that the residual of the response variable are normally distributed around the mean. This was determined by Shapiro-wilk test or Kolmogorov-Smirnov test. Autocorrelation is the measurement of the similarity between a certain time series and a lagged value of the same time series over successive time intervals. It was tested using Durbin-Watson statistic (Khan, 2008).

Multi collinearity is said to occur when there is a nearly exact or exact linear relation among two or more of the independent variables. This was tested by the determinant of the correlation matrices, which varies from zero to one. Orthogonal independent variable is an indication that the determinant is one while it is zero if there is a complete linear dependence between them and as it approaches to zero then the multi collinearity becomes more intense (Burns & Burns, 2008).

3.6 Data Analysis

The collected data was sorted, classified, coded and then tabulated for easy analysis. Collected data was analyzed using both descriptive and inferential statistics. The SPSS software version 21 was used in the analysis since it's more user-friendly. The data was

inputted into the SPSS and examined using descriptive, correlation and regression analyses. In descriptive statistics, the study used mean, standard deviation and scatter plot. In inferential statistics, the study used multivariate regression analysis to determine the relationship between the dependent variable (Stock market development) and independent variables: foreign direct investments, exchange rates, economic growth, inflation rate and interest rates.

3.6.1 Analytical Model

This study used a multiple linear regression model to determine the extent to which total variation in the dependent variable (stock market development) is influenced by the independent variables' variation.

The following regression model below was used:

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

Where: Y = Development of the stock market as measured by market capitalization as a percentage of GDP

β_0 = y intercept of the regression equation.

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = are the slope of the regression

X_1 = FDI as measured by net inflows as a percentage of GDP

X_2 = Economic growth measured as log GDP per capita on a quarterly basis

X_3 = Interest rates as measured by average quarterly lending rates

X_4 = Exchange rates as measured by quarterly exchange rate between KSH/USD

X_5 = Inflation rate as measured by CPI on a quarterly basis

ϵ = error term

3.6.2 Significance Tests

To test the statistical significance the F- test and the t – test were used at 95% confidence level. The F statistic was utilized to establish a statistical significance of regression equation while the t statistic was used to test statistical significance of the study coefficients.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The chapter discussed the analysis of data, findings, interpretations and presentation. The objective of this study is to determine the effect of foreign direct investments on stock market development in Kenya. The chapter starts with data analyzed using descriptive statistics, correlation analysis and regression analysis. The data was gathered exclusively from a secondary source.

4.2 Diagnostic Tests

The study looked for data that would be able to meet the objectives of the study. The data collected from the various sources i.e. CBK hand books and KNBS was cross checked for errors to test the validity of the data sources. The research assumed a 95 percent confidence interval or 5 percent significance level (both leading to identical conclusions) for the data used. These values helped to verify the truth or the falsity of the data. Thus, the closer to 100 percent the confidence interval (and thus, the closer to 0 percent the significance level), the higher the accuracy of the data used and analyzed is assumed to be.

4.3 Descriptive Statistics

Descriptive statistics gives a presentation of the average, maximum and minimum values of variables applied together with their standard deviations in this study.

Table 4.1 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Mkt Cap % of GDP	30	5	44	22.33	13.252
FDI net inflows % of GDP	30	0	3	.60	.932
GDP per capita (usd)	30	260	1380	615.00	348.413
Inflation rate (%)	30	2	46	11.53	9.073
Interest rate (%)	30	-8	21	8.43	6.907
Exchange rate (ksh)	30	51.720	101.395	71.20107	13.673
Valid N (listwise)	30				

Source: Research Findings

Table 4.1 above shows the descriptive statistics for the variables applied in the study. An analysis of all the variables was obtained using SPSS 21 software for the period of thirty years (1987 to 2016). Market capitalization as a percentage of GDP had a mean of 22.33 and a standard deviation of 13.252. FDI inflows as a percentage of GDP had a mean of 0.6 and a standard deviation of 0.932. GDP per capita had a mean of 615 and a standard deviation of 348.413. Inflation rate resulted to a mean of 11.53 with a standard deviation of 9.073. The interest rate recorded a mean of 8.43 with a standard deviation of 6.907. The exchange rate had a mean of 71.201 with a standard deviation of 13.673.

4.4 Correlation Analysis

Correlation analysis is used to establish if there exists a relationship between two variables which lies between (-) strong negative correlation and (+) perfect positive correlation. Pearson correlation was employed to analyze the level of association between the exchange rate and the selected macroeconomic variables.

The findings of correlation analysis indicate that there was a correlation of all the predictor variables to the response variable. From the table, FDI inflows and exchange rate had a weak positive association with market capitalization as shown by correlation coefficients of .207 and .471 respectively. Interest rate showed a weak negative correlation coefficient of -0.205 with market capitalization. The inflation rate and market capitalization had a weak correlation coefficient of negative 0.616. GDP per capita had a strong positive correlation coefficient of 0.585 with market capitalization. The findings are presented in table 4.2 below:

Table 4.2: Correlations

		Mkt Cap	FDInet inflows	GDPper capita	Inflationrate	Interest rate	Exchange rate
Mkt Cap	Pearson Correlation	1	.207	.585**	-.166	-.205	.471**
	Sig. (2-tailed)		.273	.001	.381	.276	.009
FDInet inflow	Pearson Correlation	.207	1	.376*	.201	-.192	.322
	Sig. (2-tailed)	.273		.041	.286	.310	.082
GDP Per capita	Pearson Correlation	.585*	.376*	1	-.352	-.159	.839**
	Sig. (2-tailed)	.001	.041		.056	.401	.000
Inflation rate	Pearson Correlation	-.166	.201	-.352	1	-.235	-.384*
	Sig. (2-tailed)	.381	.286	.056		.210	.036
Interest rate	Pearson Correlation	-.205	-.192	-.159	-.235	1	-.013
	Sig. (2-tailed)	.276	.310	.401	.210		.945
Exchange rate	Pearson Correlation	.471*	.322	.839**	-.384*	-.013	1
	Sig. (2-tailed)	.009	.082	.000	.036	.945	
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

4.5 Regression Analysis and Hypothesis Testing

Market capitalization as a percentage of GDP was regressed against five predictor variables; FDI inflows as a percentage of GDP, GDP per capita, annual inflation rate, annual interest rate and annual exchange rate between KSH/USD. The regression analysis was undertaken at 5% significance level. The critical value obtained from the F – table was compared with the one obtained from the regression analysis.

The study obtained the model summary statistics as shown in table 4.3 below.

Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.597 ^a	.357	.223	11.684	1.851

a. Predictors: (Constant), Exchange rate, Interest rate, FDI net inflows %

of GDP, Inflation rate, GDP per capita

b. Dependent Variable: Mkt Cap % of GDP

Source: Research Findings

R squared, being the coefficient of determination indicates the deviations in the response variable that is as a result of changes in the predictor variables. From the outcome in table 4.3 above, the value of R square was 0.357, a discovery that 35.7 percent of the deviations in stock market development in Kenya occurred due to changes in FDI inflows, GDP per capita, interest rate, inflation rate and exchange rates at 95 percent confidence level. Other variables not included in the model justify for 64.3 percent of the variations in stock market development in Kenya. Also, the results revealed that there

exist a strong relationship among the selected independent variables and stock market development as shown by the correlation coefficient (R) equal to 0.597. A durbin-watson test of 1.851 is more than 105 and therefore the error terms are not serially correlated. We can therefore conclude that the data used for the study did not exhibit autocorrelation.

Table 4.4: Analysis of Variance

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	1816.225	5	363.245	2.661	.047 ^b
Residual	3276.441	24	136.518		
Total	5092.667	29			

a. Dependent Variable: Mkt Cap % of GDP

b. Predictors: (Constant), Exchange rate, Real interest rate, FDI net inflows % of GDP, Inflation rate, GDP per capita

Source: Research Findings

The significance value is 0.047 which is less than $p=0.05$. This implies that the model was statistically significant in predicting how FDI inflows, GDP per capita, interest rate, inflation rate and exchange rates affect stock market development in Kenya.

The results of the analysis obtained the model coefficients and corresponding statistics as outlined in table 4.5 below;

Table 4.5: Model Coefficients

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	11.006	17.455		.631	.534
1 FDI net inflows % of GDP	-.591	2.735	-.042	-.216	.831
GDP per capita	.023	.012	.603	1.863	.075
Inflation rate	.034	.292	.023	.115	.909
Interest rate	-.216	.341	-.112	-.632	.533
Exchange rate	-.014	.302	-.014	-.046	.964

a. Dependent Variable: Mkt Cap % of GDP

Source: Research Findings

The table on model coefficients indicates that none of the selected predictor variables is a significant determiner of stock market development in Kenya as indicated by p values that are more than 5%.

4.6 Discussion of Research Findings

The study sought to determine the effect of foreign direct investment inflows on stock market development in Kenya. The independent variable was FDI as measured by annual FDI inflows as a % of GDP. The control variables were economic growth as measured by GDP per capita, interest rate as measured by CBK lending rate, inflation rates as measured by CPI and exchange rates as measured by exchange rate between ksh

and usd. Stock market development was the dependent variable which the study sought to explain and it was measured by annual market capitalization as a percentage of GDP. The effect of each of the independent variables on the dependent variable was analyzed in terms of strength and direction.

The model summary revealed that the independent variables: FDI inflows, economic growth, interest rates, exchange rates and inflation explains only 35.7% of changes in the dependent variable as indicated by the value of R^2 which implies that there are other factors not included in this model that account for 64.3% of changes in stock market development in Kenya. The model was found to be fit at 95% level of confidence since the p-value of 0.047 is less than 0.05. This implies that overall the multiple regression model is statistically significant, in that it is a suitable prediction model for explaining stock market development in Kenya.

From the analysis, the study findings differ with the existing literature whereby FDI positively affects the development of stock market in Kenya. This is evidence from the study of Njeru (2013) who analyzed the impact of FDI on the economy of Kenya and found a significant and direct positive connection between FDI and the economy. It is also evidence from the study of Ndung'u (2011) who sort to explore the association of development of stock market and the growth of Kenya's economy. The current analysis evidences no significant association between growth of economy and Kenya's stock market development.

This study was in agreement with Chepkoiwo (2011) in his study to examine the factors that affect the development of the emerging capital markets especially NSE. The result was that inflation did not show a clear picture of the relationship. However, the study

was in contrast with Mutuku and Ng'eny (2015) in their study of macroeconomic factors and the equity market of Kenya. Their finding was a negative effect of inflation on equity market and therefore the Kenyan stock market is not an avenue for investors to perfectly hedge against inflation. This study also went an extra mile to determine the impact of interest rate on Kenya's stock market development. The result was that interest rate does not significantly influence the stock market development in Kenya.

The findings of this study contrast with Shahbaz, Lean and Kalim (2013) who conducted a study to investigate the macroeconomic variables with key concern on FDI which impact the Pakistan's stock market development. Their concern was the substitution or complementary role of FDI to the development of stock market. They employed annual data for a period ranging from 1971 to 2006. In their analysis, they applied co-integration and found out that FDI plays a complementary role to stock market development in Pakistan in that there was a significant positive association between FDI and stock market development in the long run.

This study is also in contrast with Adam and Tweneboah (2009) who used multivariate analysis and accounting of innovation method in examining the effect of FDI on development Ghana's stock market. The data was based on four quarters beginning from 1991 to 2006 where the co-integration analysis showed a long-run connection between the two variables. There was also a positive significant influence on stock market development. Also by use of variance decomposition and impulse responses from vector error correction model (VECM), Ghana's stock market development in was influenced significantly by the increasing FDI.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings of the previous chapter, conclusion, limitations encountered during the study. This chapter also elucidates the policy recommendations that policy makers can implement to achieve the expected stock market development in Kenya. Lastly the chapter presents suggestions for further research which can be useful to future researchers.

5.2 Summary of Findings

The study sought to investigate the effect of selected predictor variables on stock market development in Kenya. The predictor variables selected were FDI inflows, economic growth, interest rate, inflation rate and exchange rates. The study adopted a descriptive research design. Secondary data was obtained from the World Bank, Central bank of Kenya and Kenya National Bureau of Statistics and was analyzed using SPSS software version 21. The study used annual data covering a period of thirty years from January 1987 to December 2016.

FDI inflows and exchange rate had a weak positive association with market capitalization as shown by correlation coefficients of .207 and .471 respectively. Interest rate showed a weak negative correlation coefficient of -0.205 with market capitalization. The inflation rate and market capitalization had a weak correlation coefficient of negative 0.616 while GDP per capita had a strong positive correlation coefficient of 0.585 with market capitalization. The results of correlation also revealed that only GDP per capita and

exchange rates have a significant association with market capitalization as shown by p values of 0.001 and 0.009 respectively.

The co-efficient of determination R-square value was 0.357 which means that about 35.7 percent of the variation in stock market development can be explained by the five selected predictor variables while 64.3 percent in the variation of stock market development was associated with other factors not covered in this research. The study also found that the independent variables had a high correlation with stock market development ($R=0.597$). ANOVA results show that the F statistic was significant at 5% level with a $p=0.047$. Therefore the model was fit to explain the relationship between the selected variables.

This study was in agreement with Chepkoiwo (2011) in his study to examine the factors that affect the development of the emerging capital markets especially NSE. The result was that inflation did not show a clear picture of the relationship. However, the study was in contrast with Mutuku and Ng'eny (2015) in their study of macroeconomic factors and the equity market of Kenya. Their finding was a negative effect of inflation on equity market and therefore the Kenyan stock market is not an avenue for investors to perfectly hedge against inflation. This study also went an extra mile to determine the impact of interest rate on Kenya's stock market development. The result was that interest rate does not significantly influence the stock market development in Kenya.

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data for a period ranging from 1971 to 2006. In their analysis, they applied co-integration and found out that FDI plays a complementary role to stock market development in Pakistan in that there was a significant positive association between FDI and stock market development in the long run.

5.3 Conclusion

The study found that FDI inflows had an effect on stock market development though not to a significant extent. The study therefore concludes that FDI inflows are not one of the significant determinants of stock market development. The study found that economic growth and interest rates have a positive but insignificant effect on stock market development. The study therefore concludes that higher economic growth and interest rate in Kenya do not necessarily lead to stock market development in the country. The study found that inflation rate had an insignificant negative effect on stock market development and therefore it is concluded that higher levels of inflation do not necessarily slow stock market development. The study found that exchange rates had an insignificant negative effect on stock market development and therefore it can be concluded that depreciation in a country's currency do not significantly affect stock market development in that country in a negative manner.

This study concludes that independent variables selected for this study; FDI inflows, economic growth, inflation rate, interest rates and exchange rates combined have a significant influence on stock market development in Kenya. It is therefore sufficient to conclude that these variables significantly influence the development of the Kenyan stock market. The fact that the five independent variables explain 35.7% of changes in stock

market development imply that the variables not included in the model only explain 64.3% of changes in stock market development.

The findings of this study also indicated that the overall model selected for the purpose of this study was statistically significant implying it can be used to predict stock market development in Kenya. However, analysis of individual predictor variables revealed that individually, none of the selected independent variables is a significant determiner of stock market development. This implies that there are other variables not included in this study that significantly affects stock market development in Kenya.

This study is also in contrast with Adam and Tweneboah (2009) who used multivariate analysis and accounting of innovation method in examining the effect of FDI on development Ghana's stock market. The data was based on four quarters beginning from 1991 to 2006 where the co-integration analysis showed a long-run connection between the two variables. There was also a positive significant influence on stock market development. Also by use of variance decomposition and impulse responses from vector error correction model (VECM), Ghana's stock market development in was influenced significantly by the increasing FDI.

5.4 Recommendations

The Kenyan stock market has been developing slowly over the years implying increased recognition in the international financial markets. This study therefore recommends that the policy makers should come up with policies that will contribute to fastening the development of the Kenyan stock market as it is believed to have a direct relationship with economic growth. This study established that inflation did not show a clear effect on stock market development. Therefore, the study recommends that policies should be put

in place to ensure stable inflation rate such that investors can use stock market to hedge against inflation and hence the improvement in stock market.

The FDI inflows into the country has also been on the rise over the years and this might be an indicator that foreign investors are gaining confidence on the Kenyan economy and its ability to remain stable in the future. Although an increase in FDI was not found to have a significant impact on stock market development, an increase in FDI is likely to influence other sectors of the economy positively. This study therefore recommends that policy makers should come up with measures that will attract more foreign direct investments in the future.

The study also recommends that central bank of Kenya should set the interest rate that can help attract investment in the country as it was found that high interest rate leads to stock market development though not to a significant extent. The study further recommends that the government should enact policies that create conducive environment to carry out business activities that promote economic growth as it was found to positively influence stock market development in the country. High exchange rates were found to affect stock market development negatively and therefore policy makers should strive to maintain exchange rates at levels that will not discourage development of the stock market.

5.5 Limitations of the Study

The scope of this research was for thirty years 1987-2016. It has not been determined if the results would hold for a longer study period. Furthermore it is uncertain whether similar findings would result beyond 2016. A longer study period is more reliable as it will take into account major economic conditions such as booms and recessions. In

addition, availability of data on a quarterly or monthly basis would enable researchers to conduct studies that would yield more accurate results.

One of the limitations of the study is the quality of the data. It is difficult to conclude from this research whether the findings present the true facts about the situation. The data that has been used is only assumed to be accurate. The measures used may keep on varying from one year to another subject to prevailing condition. The study utilized secondary data, which had already been obtained and was in the public domain, unlike the primary data which is first-hand information. The study also considered selected determinants of stock market development and not all the variables affecting stock market development mainly due to limitation of data availability.

For data analysis purposes, the researcher applied a multiple linear regression model. Due to the shortcomings involved when using regression models such as erroneous and misleading results when the variable values change, the researcher cannot be able to generalize the findings with certainty. If more and more data is added to the functional regression model, the hypothesized relationship between two or more variables may not hold.

5.6 Suggestions for Further Research

This study focused on FDI inflows and stock market development in the country and relied on secondary data. A research study where data collection relies on primary data i.e. in depth questionnaires and interviews covering policy makers in Kenya on factors affecting stock market development is recommended so as to compliment this research.

The study was not exhaustive of the variables affecting stock market development in Kenya and this study recommends that further studies be conducted to incorporate other

variables like Public debt, unemployment rate, income levels, political stability and technological advancements. Stock market developments are a function of many predictor variables. Establishing the effect of each predictor variable on stock market development will enable policy makers know what tool to use when controlling stock market development.

The study concentrated on the last 30 years since it was the most recent data available. Future studies may use a range of many years e.g. from 1970 to date and this can be helpful to confirm or disapprove the findings of this study. The study limited itself by focusing on annual secondary data as it was readily available. The recommendations of this study are that further studies should use monthly or quarterly data so as to obtain more precise results. Finally, due to the shortcomings of regression models, other models such as the Vector Error Correction Model (VECM) can be used to explain the various relationships between the variables.

REFERENCES

- Adam, J. & Anokye, P (2008). A Capital Asset Pricing Model with Time-Varying Covariances. *Journal of Political Economy*, 96(1), 116-131
- Adam, A. M. & Tweneboah, G. (2009). Foreign Direct Investment and Stock Market Development: Ghana's Evidence, *International Research Journal of Finance and Economics*, 26(2), 44-69
- Adeniyi, O., Omisakin, O., Egwaikhide, F.O., & Oyinlola, A. (2012). Foreign Direct Investment, Economic Growth and Financial Sector Development in Small Open Developing Economies. *Economic Analysis & Policy*, 42 (1), 105 - 127.
- Alfaro, L., Chanda, A., Kalemli-Ozcan, S., & Sayek, S. (2004). FDI and economic growth: the role of local financial markets. *Journal of International Economics*, 64, 89-112.
- Al-Halalmeh, M. & Sayah, A. (2010). Impact of foreign direct investment on shares market value in Amman exchange market. *American Journal of Economics and Business Administration*, 2(1), 35-38
- Battem, J. A. & Vo, X. V., (2009). An analysis of the relationship between foreign direct investment and economic growth. *Applied Economics*, 41(13), 1621-1641.
- Buckley, P. J & Casson, M. C. (1976). The internalization theory of the multinational enterprise: A review of the progress of a research agenda after 30 years. *Journal of International Business Studies* 40 (9), 1563-1580.

- Burns, R. B. & Burns, R. A. (2008). *Business Research Methods and Statistics using SPSS*. London. Sage Publications Limited.
- Casson, M. (1983). Economic analysis of international supply chains: an internalization perspective. *Journal of Supply Chain Management*, 49(2), 8-13
- Casson, M. & Buckley, P. J.(1976). The governance of the multinational enterprise: insights from internalization theory. *Journal of Management Studies*, 48(2), 460-470
- Chernysheva, O. (2011). *Foreign direct investment into Swedish real estate: How has it changed during the 2000- 2010 period?* Unpublished Research Project, 2011-2016.
- Cooper, D. R., & Schindler, P. S. (2008). *Business research methods* (10thed.). New Delhi: Tata McGraw-Hill Publishing Company Limited.
- Dinga, M. O. (2009). *A study of the impact of foreign direct investments on economic growth in Kenya*. Unpublished MBA Project, University of Nairobi
- Dunning, J.H. (2003).*Transnational Corporations and Growth of Services: Some conceptual and theoretical issues*. New York: United Nations.
- Ernst & Young (2014). Attractiveness Survey; Africa.
- Errunza, V. R. (1983). Emerging Markets – A New Opportunity for Improving Global Portfolio Performance. *Financial Analysts Journal*, 39(5), 51-58.

- Garcia, F. & Liu L, (1999), "Macroeconomic Determinants of Stock Market Development. *Journal of Applied Economics*, 2(1), 12-24
- Hsu C. & Wu Y. (2009). FDI and Economic Growth: Revisiting the Role of Financial Market Development, *Far East and South Asia Meeting of the Econometric Society*, Faculty of Economics, University of Tokyo, Japan, August 2009.
- Hymer S, (1976) (1960 dissertation); The International Operations of Nation Firms: A *Study of Foreign Direct Investment*, Cambridge, MLT Press.
- Ismaila, M., & Imoughele, L. E. (2010). *Macroeconomic Determinants of Economic Growth in Nigeria: A Co-integration Approach*.
- Katz, D., & Kahn, R. L. (1978). Organizations and the system concept. *Classics of Organization Theory*, 161-172.
- Khan, J. A. (2008). *Research Methodology*. New Delhi. APH Publishing Corporation
- Khody, L. & Sohrabian, K. (2005). Financial Markets, FDI, and Economic Growth: Granger Causality Tests in Panel Data Model, *Working Paper*, California State Polytechnic University
- Kim, A.M. (2011). *The impact of foreign direct investment on economic growth and development in Kenya*. Presented at AIBUMA Conference Article, Nairobi.
- Kimotho, A.M. (2010). *The relationship between foreign direct investments (FDIs) and economic growth in Kenya*. Unpublished MBA Project, University of Nairobi.

- Kinuthia, B.K. (2010). *Determinants of Foreign Direct Investment in Kenya; New Evidence*. Paper submitted for the annual African International Business and Management (AIBUMA) Conference in Nairobi in August 2010
- Kirui, E., Wawire, N. H. W. & Onono, P. O. (2014). Macroeconomic Variables, Volatility and Stock Market Returns: A Case of Nairobi Securities Exchange, Kenya. *International Journal of Economics and Finance*, 6 (8), 214-228
- Levine, R. (2003). Finance and growth: theory and evidence, *NBER Working Paper Series, Working Paper 10766*
- Levine, R. & Zervos, A. (2005). Inflation and Asset Prices in a Monetary Economy. *Journal of Finance*, 31, 471-83.
- Miller, M. (1991). *Financial Innovations and Market Volatility*. Blackwell, Cambridge.
- Mishkin, F.S. & Eakins S. (2009). *Financial Markets and Institutions* (6thed.). Pearson Prentice Hall.
- Muchira, M. M. (2013). *Effect of foreign direct investments on economic growth in Kenya*, Unpublished research project, 2013-2015, University of Nairobi.
- Muema, J. (2013). *An Analysis of the Determinants of Foreign Direct Investment in Kenya*. Unpublished MBA project, University of Nairobi
- Ncube, N. & Ndou, E. (2011). Inflation Targeting, Exchange Rate Shocks and Output Evidence From South Africa. *African Development Bank Group working paper no. 134*

- Ndung'u, D. K. (2011). *The relationship between economic growth and stock market development: The case of Nairobi stock exchange*. Unpublished MBA Project, University of Nairobi.
- Ngugi, R., Amanja, D. & Maana, I. (2010). *Capital market, financial deepening and economic growth in Kenya*, Unpublished research paper, University of Nairobi.
- Nwosa, P.I., Agbeluyi, A.M. & Saibu, O.M. (2011). Causal Relationships between Financial Development, Foreign Direct Investment and Economic Growth the Case of Nigeria. *International Journal of Business Administration*, 2 (4), 93 –102
- Nyaga, N. (2013). *The Impact of Foreign Direct Investment on Economic Growth in Kenya*. Unpublished Research Project, 2010-2014.
- Odo, S. I., Anoke, C. I., Nwachukwu, J. O. & Agbi, E. P. (2016). Impact of foreign direct investment on stock market growth in Nigeria. *Asian Research Journal of Arts & Social Sciences*, 1(2), 1-14.
- Olson, M. (2008). *The rise and decline of nations: Economic growth, stagflation, and social rigidities*. Yale University Press.
- Omoke, J.M. (2010). *The relationship between capital market development and economic growth in Kenya*. Unpublished MBA Project, University of Nairobi.
- Oseni, I. O. & Enilolobo, O. S. (2011). Effects of foreign direct investment and stock market development on economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 2(9), 2222-2855.

- Osoro, C. & Ogeto, W. (2014). Macro Economic Fluctuations Effects on the Financial Performance of Listed Manufacturing Firms in Kenya. *The International Journal of Social Sciences*, 20 (1), 26-40
- Philbert, A. O. (2012). *The relationship between foreign direct investment, financial market development and economic growth in Kenya*. Unpublished MBA Project, University of Nairobi.
- Prebisch, R. (1950). *The Economic Development of Latin America and its Principal Problems*. Lake Success, N.Y. United Nations.
- Rogoff, K. (2005). The Purchasing Power Parity Puzzle. *Journal of Economic Literature*, 34, 647-668.
- Samuelson, P. A. & Nordhaus, W. D. (2010). *Economics*. New York. McGraw Hill
- Seile, L. (2009). *An Empirical Investigation of the Relationship Between Selected Macro Economic Variables and the Nairobi Stock Exchange 20 Share Index*. Unpublished MBA Project, University of Nairobi.
- Shahbaz, M., Lean, H. H. & Kalim, R. (2013). The impact of foreign direct investment on stock market development: Evidence from Pakistan. *Economic Research*, 26(1), 17-32.
- Thomas, D. B. (2006). *Money, Banking and Financial Markets*. Thomson- South.
- Tucker, I. B. (2007). *Economics, for Today's World*. Thomson South Western.
- UNCTAD (2002). *World investment report*, New York and Geneva: United Nations.
- UNCTAD (2015). *World investment report*, New York and Geneva: United Nations.

- Wanjala, J. B. (2014). *Macro-economic determinants of stock market performance in Kenya: case of Nairobi securities exchange*, Unpublished MBA Project, University of Nairobi.
- Yartey, C. A. (2008). *The Determinants of Stock Market Development in Emerging Economies: Is South Africa Different?* IMF Working Paper, 08/38. Washington DC: International Monetary Fund
- Zafar, S. Z., Ahmad, H. & Khan, T. A. (2016). Economic implication of foreign direct investment on development of stock market in Pakistan. *International Journal of Scientific & Engineering Research*, 7(10), 930-935.