Effects of Foreign Portfolio Flows on the Capital Market in Kenya

By

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DECLARATION

This research paper is my original work and has not been presented for a degree award in any other university.

Signature…… Date……

Lewis Kimathi Nyaga

This research paper has been submitted for examination with my approval as university supervisor.

Signature……. Date……

Dr. Antony Wambugu

DEDICATION

I dedicate this research paper to my mother, sister and uncle for the courage and support both financial and moral until I was able to finish my studies.

ACKNOWLEDGEMENT

I would like to say thank you to the almighty for his guidance and answering my prayers and ensuring that I have seen this day. I am also grateful for the much strength and endurance he has given me.

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LIST OF ABBREVIATIONS

NSE	-	Nairobi Securities Exchange
CMA	-	Capital Market Authority
GDP	-	Gross Domestic Product
USA	-	United States of America
IPO	-	Initial Public Offer
LDCs	-	Less Developed Countries
FDI	-	Foreign Direct Investments
FPI	-	Foreign Portfolio Investment

ABSTRACT

This research paper aims at studying the foreign portfolio investment and how they related to market capitalization in Kenya. The paper uses the neoclassical theories of capital flows in developing the analysis. The study uses secondary data in carrying out the analysis. For this purpose, times series monthly data from 2007 to 2015 is used. On the basis of stationary ordinary least square model is used to examine how foreign portfolio investment, interest rates, exchange rate, and returns in foreign and domestic markets influence and affect market capitalization in Kenya. The study shows that there is a significant positive impact of foreign portfolio investment on market capitalization in the Kenyan capital market. It is also seen that fluctuations of the exchange rate negatively affect the market capitalization, whereas returns in the domestic market positively affect the market capitalization.

DEFINITION OF TERMS

Foreign portfolio flows – These encompass the transfer of assets such as cash, bonds, or stocks across international borders, in pursuit of profits.

Interest rates- These are the rates charged or offered for an asset and are expressed as a percentage.

Market capitalization – This is total value of a company's outstanding shares.

Capital market – This is markets for buying debt and equity instruments.

Exchange rate – This refers to the value of a country's currency in terms of another country's currency

Domestic market – This represents the markets for trading and issuing of securities of entities domiciled in a country

Foreign/International market – This represents the markets for trading and issuing of securities that at issuance are offered in a number of countries or are issued outside the jurisdiction of any single country

Mutual funds – These are investment vehicles that comprise of pools of funds collected from various investors who are pursuing investments in securities such as bonds, equities, and money market instruments. They are operated and managed by fund managers who invest on behalf of the investors. The funds are managed and structured as well as maintained to match the investment goals stated in the prospectus

Fund managers – there are people and institutions responsible for coming up with a fund's investing strategy and managing its portfolio activities.

Pension schemes – These are saving plans that help people save money for use in the future, especially during old age. It is a form of long-term saving plan. The pension schemes invest the money on behalf of the pensioners from which they get returns. One area they invest in is capital markets.

CHAPTER ONE

INTRODUCTION

1.0 Background of the Study

The key role of the financial sector in an economy was introduced by Schumpeter (1911). Schumpeter said that financial intermediaries, which form part of the financial sector, provide services such as saving mobilization, project evaluations, and facilitating financial transactions. The general idea is that financial intermediaries evaluate entrepreneur and thus lend to the most promising investment projects. Capital market is a part of the financial sector. According to Stefanakis (1996), capital markets enable trade in financial instruments. The financial instruments traded in include equities, bonds, bills and corporate papers. Capital markets channel investments and savings between investors and users of capital such as government, businesses and individuals. Capital markets are divided into primary markets, where new equities and bonds are issued, and secondary markets where investors trade in existing financial instruments.

Capital market supports the economy of any country. First, it provides savers and investors the opportunity to invest in financial instruments that have better returns than bank deposits depending on their risk profiles. Second, capital markets enable lending to the government and businesses and thus encouraging investment. Third, capital markets enable the stabilization of stock prices as well as reduce the instabilities in the prices by providing capital to borrowers at considerably lower interest rates and longer terms. Forth, capital markets complement the financing by banks. Fifth, capital markets provide financing for activities which banks and other

lenders may view as riskier, thus contributing to innovations in an economy. Sixth, capital markets increase access to local financing helping to manage inflation and foreign exchange risk.

Foreign portfolio investment form part of the capital market activities. Foreign portfolio flow is defined as an aspect of capital flows that encompass the transfer of assets such as cash, bonds, or stocks across international borders (Ozurumba, 2012). Foreign portfolio investment thus occurs when investors purchase stocks of foreign companies or buy securities or notes. The investors take advantage of their accumulated wealth by moving their assets to markets where they expect high returns.

According to French and Potebra (1991), foreign portfolio investments have benefits to the developing and emerging markets. The reason given was that foreign investors' participation in the domestic market leads to a lower risk premium of stocks. This induces local investors to offload their stocks as prices increase. They thus proceed to acquire stocks of other companies trading at lower costs, increasing the overall market capitalization at the security exchange. As this continues, there is a growth of the capital market through resource mobilization and confidence of investors to source for capital through the stock market. The sourcing may be by initial public offers, private settlement or selling of debt securities such as corporate bonds.

According to Ahmed and Funke (2005), foreign portfolio flows to the developing and emerging market have been increasing over time. According to the paper, the increase in foreign portfolio investments in the developing countries is attributed to a number of factors. These factors include the opening up of the capital markets in the early 1990s, which resulted to a shift in external financing from long term bank loans and official development assistances to private capital inflows. Secondly, global factors such as the fall in the US interest rates in 2001 to a 40

years low led to an increase of portfolio investments by investors from the developed countries to the developing and emerging countries.

Foreign portfolio flows to the developing countries remain low. Haussmann and Fernandez-Aris (2001) found that the proportion of foreign direct investment to total private flows was 80% in LDCs and 40% in Emerging markets. Wesso (2001) tried to explain this by saying that it was because of firms in LDCs preferring to keep hierarchical control where transaction costs are high rather than rely on franchises and other arrangements such as listing in the securities exchange. However, over time and with massive reforms in the financial and capital markets, there has been a need to lower the transaction costs by firms, leading to a substantial increase in the non-FDI private flows from an average of 20% in 1990s to above 30% by 2001 (Haussmann and Fernandez-Aris, 2001).

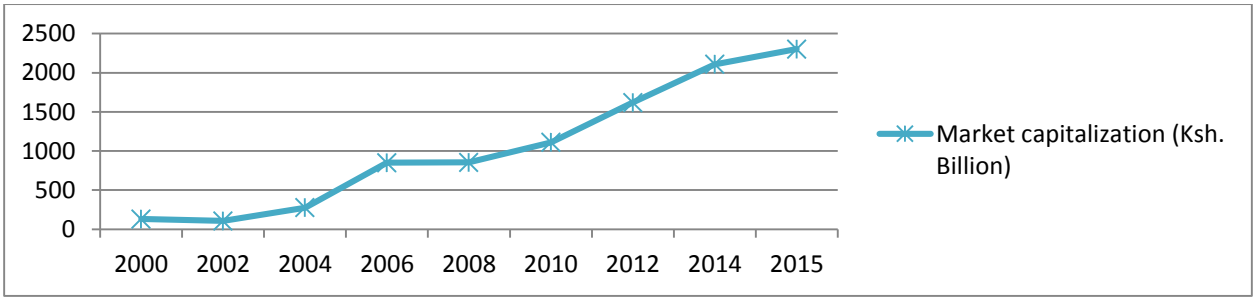
In Kenya, the capital market has gone through several liberalization reforms from the mid-1990s. This has led to opening up of the market to foreign investment (Ngugi, 2003). As a result there have been more foreign investors looking for high returns and diversification in Kenya and who have invested through the Nairobi Securities Exchange (NSE) enabling the country to enjoy the benefits associated with foreign portfolio investment. First, with foreign portfolio inflows, the country has seen a decrease in the cost of capital. Secondly, the decreasing costs of capital are enabling companies to finance their growth by listing in Nairobi Securities Exchange (Ngugi, 2003). Lastly, local and foreign investors' participation in the stock market has led to a diversified composition of investors in the market.

Table 1.1: Share volume, turnover and capitalization at Nairobi Securities Exchange, 2000 - 2015

Year	2000	2002	2004	2006	2008	2010	2012	2014	2015
Share volume (Million)	141.60	146.96	525.88	579.94	2154.90	4919.54	5389.00	7706.00	7451.00
Share turnover (Ksh. Billion)	3.60	2.93	20.35	60.28	106.84	110.30	124.10	182.64	222.00
Market capitalization (Ksh. Billion)	130.60	105.30	274.41	851.00	853.70	1109.00	1618.00	2107.00	2,301.00

Source: Nairobi Securities Exchange data.

Figure 1.1 NSE Market Capitalizations from 2000 to 2015.



The data in table 1.1 and the figure 1.1 shows that there has been a growing participation of investors in the Kenyan capital market. From 141.60 million shares traded in 2000, the share volume grew to 7706.00 million shares in 2014, increasing the market capitalization to Ksh. 2107.00 billion in 2014 from Ksh. 130.60 billion in 2000. However, there have been periods of fluctuations that coincide with the 2007 financial crisis, which reduced foreign participation in the capital market, and 2008 and 2009 after the post-election violence, which reduced investors' confidence in the markets in Kenya.

From figure 1.1 NSE has witnessed a continuous growth from 2000 to 2015. We can attribute this to a number of factors, which include rules and regulation implemented to improve the performance of the market. According to NSE, 2008 during the revitalization period, capital controls were relaxed for offshore borrowing in 1994 with complete liberalization of offshore borrowing in May 1995. Several improvements are continuously being implemented to improve efficiency and strengthen the capital market in Kenya for instance, the inception of Capital Market Authority (CMA) in 1990 to regulate the market (NSE, 2008).

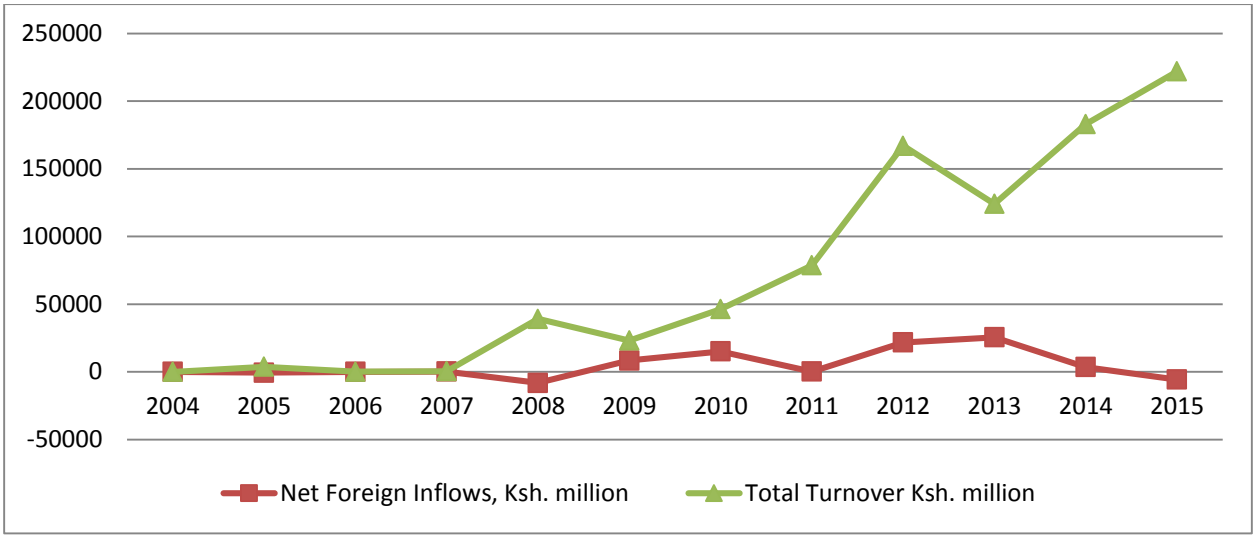
Table 1.2: Foreign Investors' activities in the Nairobi Securities Exchange over 2004-2015.

Year	Net Foreign Inflows, Ksh. million	Total Turnover Ksh. million	Net Inflows to Total Turnover (%)
2004	(20.1)	28.2	(1.28)
2005	(667.6)	3,707.9	(18.00)
2006	(0.5)	106.8	(0.47)
2007	249.8	384.7	64.93
2008	(8,189.2)	39,149.0	(20.92)
2009	8,326.0	23,120.4	36.01
2010	15,126.8	46,285.9	32.68
2011	220.3	78,764.9	0.28
2012	21,734.0	167,100.0	13.01
2013	25,563.0	124,100.0	20.60
2014	3,530.0	183,000.0	1.93
2015	(5,701.0)	222,000.0	(2.57)

Source: NSE and CMA Annual Reports

From the table 1.2, the figures in blankets show an overall decrease in net foreign inflows in relation to the total turnover, in both numbers and as a percentage. Net foreign portfolio inflows are the net difference between the foreign portfolio inflows and foreign portfolio outflows.

Figure 1.2. Graph on net foreign inflows and total turnover.



As of table 1.2 and figure 1.2, volume of shares traded daily has been increasing on average with the highest amount of total turnovers being recorded in recent years (i.e. from 2005 to 2015) as shown in Table 1.2. However, the amount of net foreign inflows has remained near zero from 2004 to 2007. This decreased below zero between 2007 and 2009. From 2009 to 2011, the level of net inflows increase above zero and returned to near zero in 2011. The amount increased again above zero between 2011 and 2014 from where it dropped to near zero again.

1.1 The benefits of Global Diversification and embracing foreign investments

One of the most known incentives for investing in any foreign market directly or by way of portfolio investment is the benefit the investor gets as a result of diversification across domestic and foreign markets. These benefits have been under study for decades. In their articles about five decades ago, Grubel (1968) and Levy and Sarnat (1970) showed that foreign stocks in a portfolio that also has domestic stocks gives a substantial risk reduction because of the relative low correlation between foreign asset returns and domestic asset returns. Grubel 1968 said that through global diversification, the local markets are able to shift their savings to equity

investments as more investors encourage local investors to use their savings to invest in local equities and bonds.

Mutual funds have enabled people to invest more easily. The risks taken by individual investors have reduced as the investor have the opportunity to use professional manager to assist them invest in a combination of stocks (Fuchita and Robert, 2008). This increases their expected returns substantially. Again, foreign investors do not need to look for links in foreign markets to be able to invest. Domestic mutual funds assist local investors to invest in foreign markets with what is referred to as offshore investments (Fuchita and Robert, 2008). The shift from local savings in banks to pension and mutual funds plays a vital role in increasing holding of equities in the developing and emerging markets. Competition among funds as they strive to grow their pools has pressured fund managers to come up with better products that are performing well in the capital markets. At the same time, by pulling large amounts of money, fund managers are able to expand to other markets offering their investors a range of products and alternatives across the capital and financial markets (Fuchita and Robert, 2008).

1.2 Problem statement

When foreign portfolios flow into a country, the impacts are felt on other macro-economic factors. These portfolios are highly reversible and therefore, there is an expectation that they have linkage with interest rates and exchange rates (Sash et al., 1996). This means that they will have an effect on the return of the firms. This will affect the market capitalization of the firms and consequently the overall market capitalization at the securities exchange. The inflows of this capital can lead to an increase in net foreign assets or increase in the amount of available credit

in the country depending on the form in which they come in, either as debt or equity. In both cases, the capital market will be impacted by their presence (Kim and Young, 2009).

At the securities exchange, when there is a surge in foreign portfolio flows, it will lead to a change in information flow, efficiency and liquidity. According to (Stulz, 1999), this will in turn affect the returns on the market. Any possible reversal of the portfolio flows, will lead to uncertainty in the market, which may cause panic among both foreign and local investors. This leads to prices dropping, and investors will start to offload their investments. As local investors may not be able to buy all the stock released by the foreign investors, prices may drop further eroding most of the capitalization gained in the capital market, as well as for the individual firms. Given this discussion, it is therefore essential to determine the relationship and impacts of foreign portfolio investments on the capital market capitalization in Kenya.

1.3 Research Questions

The question for the research is:

What is the relationship between foreign portfolio flows and the market capitalization in the Kenyan capital market?

1.4 Objectives of the study

The main objective of this paper is to examine the effects of foreign portfolio flows on the capital market in Kenya. The specific objectives are to:

1. Determine the relationship between foreign portfolio flows and market capitalization in the capital market.
2. Discuss the policy implications of the study.

1.5 Significance of the Study

This paper aims at identifying the relationship and impacts of foreign portfolio investments on the capital market capitalization in Kenya and value of shares of listed companies. The paper enables the readers to assess the role played by foreign portfolio flows in the domestic securities market given the substantial concerns of the flows causing instability due to the volatility nature of the capital market capitalization in the developing markets as well as their ease of reversibility. To the policy makers, the study enables them to understand how foreign portfolio flows affects and are linked to the growth and development of the capital markets. To the investors, the study enables them to understand how foreign portfolio investment bring benefits through an increased liquidity of the domestic capital market. To the scholars, the study will enhance the already existing studies on the topic by using a different methodology to study the linkage between foreign portfolio investment and market capitalization. The paper also narrows the study to Kenya.

1.6 Organization of the Study

The rest of the paper is organized as follows: Chapter Two presents the literature review on the subject. Chapter Three explains the methodology of the paper. Chapter Four discusses the results and chapter Five presents conclusions and policy recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter analyzes literature by selected authors on foreign portfolio investment and capital market capitalization in Kenya. It looks into the theoretical aspects studied on portfolio flows, capital flows, stock markets returns, market capitalization, and capital markets. The chapter also reviews empirical literature, on the topic as prelude to developing the methodology for the paper.

2.1 Theoretical Literature review

Foreign investors invest in capital markets and stocks that offer higher returns than what they are able to get from their domestic markets. According to Alfaro (2007), stock returns are a reflection of lower costs of capital, and market efficiency in a capital market. The paper found no direct link between market liberalization enabling inflows of capital from international markets and exchange rate and market capitalization volatility as well as inflation with stock returns. However, according to the paper, stocks that have increasing returns have increasing or high market capitalization, and tend to have increasing interest from foreign portfolio investors.

Kaur, et.al. (2010) studied what attracts foreign portfolio investments. According to their paper, market capitalization and returns of listed firms have a significant positive influence but only in the short run. According to them, among the various macroeconomic determinant of portfolio inflows in the country, returns is the main factor that had both the short run and long run effects. The findings of the paper were that, as much as investors consider the size of the firms in terms of their capitalization initially as they set to invest in a firm or in a portfolio comprising a number

of firms, in the long run, they considered the returns more as opposed to the size of the firm in terms of its market capitalization.

According to Crake and Berko (1997) there have been a number of hypothesis put forward explaining the correlation between foreign portfolio inflows and returns in the stock markets. One of these theories is the base broadening hypothesis which suggests that the inflows lead to a price increase in the stock market. With the broadening of the base, there is greater diversification as well as lowering of the risk premium. The authors found that these results in an influx of new investors lowering the perceived liquidity risk of stocks increased the level of capitalizations of the firms in the securities market.

According to Stulz (1999), financial markets theory studies the effects of the portfolio flows on returns. Returns have a direct link with market capitalization. He argues that foreign portfolio flows increase prices when they enter a market, and lead to a decrease in the prices when they leave the market, which leads to price volatility, affecting to the larger extend the market capitalization. Price volatility affects the returns offered to investors by the affected firms. The portfolio flows will also influence the valuations of stocks in the securities exchange. This is more so if the foreign investors made their investments based on information asymmetry. The investors may have had information that is yet to be incorporated in the stock prices hence stabilizing them.

There is considerable evidence from various markets that investor flows push prices. The push on prices affects market capitalization. For instance, Froot and O'Connel (1997) studied the catastrophe risk prices away from estimates of fair value. Goompers and Lerner (2000) provided results that were similar to those of Froot and O'Connell for the private equities. The studies

concluded that foreign investors may lead to a rise or fall of prices that would lead to excessive offloading of assets by other investors which can cause unexpected shocks in the capital market. The uncertainties that this bring lead to erosion of market capitalization, before the information is absorbed and the market stabilize again.

Market capitalization and returns of the individual listed firms determine portfolio returns in the securities exchange. According to Reinganum (1999) these returns are what attract both foreign and local investors, as with the knowledge of the returns of individual firms, investors can successfully manage their market capitalization exposure with each firm or are able to alter the exposure. The author continued to say that greater flexibility in shifting market capitalization among the companies listed in a securities market would enhance return. In explaining further the relationship between returns and foreign portfolio flows, Maharaj et al. (2011) found that portfolio flows are integrated with the market returns and affect the market conditions through purchase of securities, equities and assets. In this perspective, they say that international equity flows are important for foreign investors wishing to invest in developing countries as opposed to foreign direct investment.

Goldstein (1995) found that the level of market liquidity is a vital element in the decision to invest in emerging markets by the foreign portfolio investors. According to the paper, an adequate market infrastructure as well as the availability of exit mechanisms contributes to greater liquidity in the securities exchange. The increased liquidity increases the levels of trading in the secondary market for the developing and emerging markets, thus increases the market capitalization of the individual firms whose stocks these foreign investors trade in, and the overall market capitalization.

Foreign institutions comprise the largest portion of foreign portfolio investors in securities exchanges' of developing countries. According to Samuel (1996), foreign institutions investors lead to improved liquidity in the domestic market leading to a lower demand for high yields. These investors are able to sell of their securities at decreasing costs. This leads to a decline in the cost of capital. The paper states that the decreasing cost of capital induces the corporate sector of the domestic market to issue additional share or issue initial public offerings which lead to an increase in the market capitalization and an increase in liquidity. When liquidity improves, more new foreign investors are attracted to the market.

Sethi (2008) studied the effects of the international portfolio flows on the capital market and the capital market growth, trends and composition. The theory the paper puts across is that foreign investors have a negative impacts on the capital markets, but the effects are very minimal. He concluded that developing and emerging markets should move to influence the size and composition of the foreign portfolio flows, and this will affect the size and performance of the capital market. The paper continued to say that the size of the capital market is easily measured by the overall market capitalization of the listed firms. Due to the volatility of the foreign portfolio flows, the paper says that the market is affected negatively if the proportion is too high and there are shocks that affect the performance of the local listed firms. Most of the foreign investors will offload their investments negatively affecting the market capitalization.

Various features such as improved market performance, and stumpy interest rates affect the asset prices in the stock markets. Asset prices have an indirect link with the market capitalization. While studying the market in Korea, Lucey (2007), explored the effects of portfolio inflows on the domestic asset prices. They found that there is a stimulus of shocks that are linked to

portfolio inflows which strikes further the stock markets. The effects on the prices of stocks directly affect the capital market capitalization. If the prices fall, so does the capitalization.

There are a number of factor that have been suggested as leading to the increased interest by foreign portfolio investors in developing capital markets. Siamwalla (1999) argues that lows yields experienced in the developed countries as well as the attractive returns and impressive capital market growth in the developing countries are the main factors which motivate foreign investors to take their wealth and invest in the capital markets of developing markets. The author says that the increase in foreign portfolio flows corresponds very well with the trends in international financial linkages. The increased inflows lead to more investment in individual firms leading to an increase in the market capitalization,

2.2 Empirical literature review

Several empirical studies have examined the relations that exist between foreign portfolio investment and capital market capitalization in the emerging markets. However, there are few studies on the topic in Kenya and East Africa.

Pachori and Totala (2012) looked into the impacts of financial leverage of foreign portfolio investment on stock returns and market capitalization in India. Simple linear regression analysis was employed to establish the effects using time series data. The study also discussed the probable causes of the findings opening new opportunities of research. The study suggested that local firms should leverage on foreign investors to increase their returns as well as their capitalization.

Ozurumba (2012) studied the effects foreign portfolio flows have on stock returns in Nigeria. He used linear regression analysis to capture the effects of foreign portfolio flows as well as inflation on the returns in the securities exchange and Granger causality to analysis the direction of causality between the variables. From the result of the study, it was concluded that foreign portfolio flows have positive as well as significant effects on the securities markets returns. With relation to causality, it was concluded that unidirectional causality runs from market returns to foreign portfolio investments in an economy. The study went ahead to recommend policies be put in place which attracts foreign portfolio investments as well as enhance market returns hence increase the market capitalization.

In a study on Ghana, Twerefou and Nimo (2005), using the asset pricing model found that stock returns are highly related to the macroeconomic factors such as interest rates and inflation in relation to industrial asset prices. They also found from the analysis that financial assets make the best gains in the markets. They say that both local and foreign investors consider this before deciding on any possible investment through the stock exchange. The authors used asset pricing model to carry out the study.

According to Nyang'oro (2013), the effects of portfolio flows on stock market performance show that the returns at Nairobi Securities Exchange are affected by portfolio flows. Using arbitrage pricing theory(APT) in the study, Nyang'oro found that foreign portfolio flows push stock prices up when they come in, which may be due to rising demand. The paper also found that exchange and interest rates are significant in determining stock market performance, which he linked to market capitalization. With higher prices and stability of interest rates, there are more inflows of foreign investors in the country.

Demirguc and Levin (1996) come up with three different ways to characterize securities market development. They considered this to be the multifaceted concept involving issues such as market capitalization, integration with the international markets, and liquidity. The study was carried out using a sample of eight countries. It used time series data. Even though they did not provide any unique measures for stock market development, they suggested that market capitalization, and integration to the international markets affected the foreign portfolio inflows in the capital markets many emerging and developing markets.

In a study in Malaysia, Mun et al. (2008) studied the relationship of Foreign Portfolio Investments (FPI) to growth and performance of the capital markets. The study analyzed the relationship of FPI with growth of the capital markets using the Granger causality test. The study found that growth of capital markets as well as economic growth is the major pull factor in attracting Foreign Portfolio Investments in a country. The study recommended healthy economic and structural reforms in the capital markets for continuous confidence by the foreign investors.

In a study of foreign portfolio flows in Nigeria, Ekeocha (2008) said that foreign portfolio investments, though volatile, are an important source of financing to support investment in countries that have wide savings-investment gaps. They contribute in a large extend to the growth and stabilization of the market capitalization of the listed firms in the securities exchange. The study used multiple regression analysis model of vector error correction model (VECM) in carrying out the data analysis. The study concluded that FPI flow in Nigeria had a positive long run relationship with market capitalization.

Kenneth (2009) used multiple regression analysis to look into which factors yielded the best model for market capitalization. The study also looked at how these factors lead to foreign portfolio investment and contributed to the increase in market capitalization. The factors that were considered included dividends, price earnings ratio, brand value and price to sales ratio. From the analysis, it was found that brand value of the top companies in a country attracted more investors, who were ready and willing to invest in them. They concluded that brand value had a high correlation with market capitalization of these companies.

Mathew and Odularu (2009) focused on the effects of companies' shares on their performance using the top companies in Nigeria Securities Exchange. The study analyzed the effects of the performance and ability to attract foreign portfolio investments using their turnovers, profits, and other variables that affect their market capitalization. Using ordinary least square analysis for a period of 20 years, the study concluded that there was a positive relationship between the value of the companies in terms of market capitalization and ability to attract foreign investments, which is directly linked to their performance.

Kumar and Shah (2009) come up with a framework, which they used to link equities (both local and foreign) to market capitalization. They tested the framework empirically with fortune five hundred firms. The findings were that, the equity framework could be used to predict the market capitalization of firms in a securities market. They also found that market strategies such as those aiming at attracting foreign portfolio investments not only led to an increase in stock prices and hence market capitalization, but also market expectation.

Kim and Young (2009) looked at the effect of portfolio investment on the capital market in Korea from 1999 to 2007. Using the vector auto regression model in their study, they found that

foreign portfolio flows directly affecting the demand for assets. This is by affecting money supply in the country or the liquidity, which in return boosts asset prices and consequently the economic boom in the receiving countries. They concluded that capital inflows boost asset prices, and the tendency of capital inflows to generate capital market growth by way of increasing the market capitalization. The paper thus, concluded foreign portfolio flows affect market capitalization.

In Malaysia, Jarita and Salinah (2009) looked at the relationship that exists between economic performance, capital markets and foreign portfolio investment. The study analyzed the relationship using Granger causality test as well as Toda's non causality test to look into the direction of causality between the variables. In the analysis, the study found evidence that economic growth causes changes in foreign portfolio investments as well as it volatility in the market capitalization. The result of the study suggests that growth of an economy is a key pull factor that attracts foreign investors hence an increase in market capitalization and higher stock returns. The study also made recommendation in that there need to be a healthy economy for sustainable growth, as this will boast investor confidence.

Franxen et al. (2009) studied how foreign portfolio investments affect the Brazilian capital market. The study covered the period between 1995 and 2005. The methodology used was vector autoregression (VAR) analysis. The study found out that foreign portfolio investments are positively related to the returns in the capital market in Brazil. They said that the high returns attracted more international investors, who lead to an increase in the value of the market capitalization. The study found that investors enter the market after the rise of the market indexes.

Others who examined the issues of portfolio flows are Mbao (2005) who concluded that there is a positive relationship between equity capital flows and stock returns which is directed linked to market capitalization of firms listed in a securities exchange. In a similar conclusion, Bekaert and Harvey (2000) found that foreign portfolio flows decrease the cost of capital in the emerging and developing markets. The decreased cost led to efficiencies thus attracting more and more investors, increase the prices of shares, and consequently market capitalization. Both studies used OLS to look at the relationship between foreign portfolio flows and market returns.

2.3 Overview of literature

Foreign portfolio investment in Kenya has increased overtime. Only a few scholars have looked at the subject. Even those who have studied the topic, they have based their studies on the returns and performance of the stocks in the securities exchange such as Nyang'oro (2012). This paper focuses on how foreign portfolio investments affect and link with the capital market capitalization. By researching on various studies on the topic of foreign portfolio investment and capital market capitalization, this paper enhances the studies by focusing on Kenya, and studying specifically the link between the foreign portfolio investments and market capitalization.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

In this chapter, the paper goes through the research methodology. The chapter analyzes the theoretical framework and goes ahead to specify the model that is being estimated, based on the theoretical framework. The chapter explains the variables that are used in the model, the source of data, and the pre-estimation tests to be carried out.

3.1 Theoretical Framework

The framework for the study is a variant of flow theory of capital movement as illustrated by Sachs et al. (1996). The authors looked at the financial events that followed the devaluations of the Mexican peso, an experience that was referred to as the "tequila effect". The authors used returns to foreign investors to look at why some emerging markets were affected by the financial crisis of 1994 -1995 while others were not affected. Foreign portfolio investment is an investment model in which investors seek returns in foreign countries without seeking any control over the firms in which they invest. Their investments are through the purchase of equity and government debt in a foreign stock market.

Given this background, this paper analyzes the effects based on the following representation of the total stocks in an open economy:

$KA=f(r, r^*, e)$ ------- (1)

Where: KA-stock of capital, r is the domestic interest rate, r* is the foreign interest rate, and e is the exchange rate.

If we differentiate equation 1,

$$dKA = \frac{\partial f}{\partial r} dr + \frac{\partial f}{\partial r*} dr * + \frac{\partial f}{\partial e} de \text{ -------- (2)}$$

We note that;

$$\frac{\partial f}{\partial r} > 0, \frac{\partial f}{\partial r*} < 0, \frac{\partial f}{\partial e} < 0$$

From this model, an increase in the domestic interest rate attracts more foreign investors into the country, and that a decline in the foreign interest rates encourages foreign investors to look for alternatives, decreasing inflows and those already in the country increases their outflows. A depreciation of the domestic currency will be followed by a decrease in the value of investment by foreign investors, as well as increase in the transaction costs, decreasing the potential gains from international diversifications by making purchase of foreign portfolios in this market more risky.

3.2 Model Specification

Based on the theoretical framework, whereby the paper tries to explain the relationship between foreign portfolio flows, interest rates, exchange rate, and the capital market capitalization, the paper now goes into specifying the model to be estimated:

MC= F (FPI, ROID, ROIF, TBILL, E,)

Therefore, we specify the empirical model as following;

$$\Delta MC = \beta 0 + \beta 1 \Delta FPI + \beta 2 \Delta ROID + \beta 3 \Delta ROIF + \beta 4 \Delta TBILL + \beta 5 \Delta E + \varepsilon t$$

From the model, ΔMC is the percentage change in market capitalization in the Kenyan capital market, ΔFPI is the percentage change in foreign portfolio investment, ΔROID is percentage change in the return on investment in the domestic market, ΔROIF is percentage change in the return on investment in the foreign market which is captured by return on international stocks measured using the US stock returns, ΔTBILL is the percentage change in the 91 days treasury bill, and ΔE is the percentage change in the exchange rate. εt is the error term.

The expectations for many is that return on domestic stock markets and foreign stock would exhibit an inverse relationship, which would be hinged on some market characteristics such as transparency, efficiency, liquidity, as well as dynamism among others. Thus, it will be expected that $\beta1>0$, $\beta2>0$, $\beta3< 0$, $\beta4< 0$, and $\beta5<0$. $\beta1>0$ implies that FPI inflow should affect MC positively, and $\beta2>0$ means that high return on investment in the domestic market will positively affect MC. $\beta3< 0$ will be based on the assumption that the lower the foreign return on investment in relation to the domestic return, capital would flow inwards to the domestic market. $B4<0$ means that higher T-bill rate (interest rates) would affect MC negatively as higher T-bill rate leads to diversion of investment to government securities. $B5<0$ means that deterioration of the exchange rate of the local currency will discourage foreign portfolio investments, as foreign investors will lose confident in the domestic market and on future returns. Others will pull out. This is expected to have a negative effect on the domestic capital stock, which forms MC.

3.3 Variables and measurements

The paper in this section explains the variables used, the data sources and the frequency of the data as well as the period of analysis. The six variables used in the model are explained.

3.3.1 Percentage change of foreign portfolio investment (FPI)

Data on percentage change in foreign portfolio investment (FPI)are taken from the net monthly flows in the securities market. Since portfolio flows can be in either direction, the paper uses net foreign portfolio flows, which are, foreign portfolio inflows less foreign portfolio outflows in that month. The percentage change in the net portfolio flows are used in the estimation. The use of net inflows is so that the paper analyze the net effects of the foreign portfolio investment month on month. When the expectation by investors is that foreign portfolio inflows will increase, the returns of stocks in the domestic market improve, thus having a positive impact on the capital market. This means that a positive relationship is expected between the inflows and capitalization in the market.

3.3.2 Percentage change in the return in the domestic market (ROID)

This is an independent variable, which is measured using the percentage change in monthly average in the return in the NSE 20 share index. The 20 share index represents the share percentage of the top 20 companies that are traded in the NSE, whose equity is highly sought by the foreign investors, as they are deemed to be more stable. The NSE 20 index captures the share prices of the top 20 companies, thus a positive correlation with the total market capitalization at NSE. These companies contribute more than 50 percent of the total market capitalization in NSE. Their change in the average monthly return are used to measure return on the domestic market.

3.3.3 Percentage change in the return in the foreign market (ROIF)

This is an independent variable, which is estimated using date from the Standard & Poor's Index (S&P 500) index, which is used to measure returns on chosen US equities and the most commonly used benchmark for U. S stock market. This index is used to proxy the returns in the international markets. It is therefore, an indirect measure of the integration of the international market and the local market, in this case, the Kenyan market. Higher returns as may be depicted by this index is expected to make foreign investors to invest in the foreign markets. This therefore leads to a decrease in inflows to the domestic market and an increase in outflows. What this does to the prices in the local market is that, the prices will fall, leading to lower returns and subsequently to lower market capitalization.

3.3.4 Percentage change in the Treasury bill rate (TBILL)

This variable is used to measure the effect of percentage changes in the 91-day Treasury bill rate on market capitalization in Kenya. It is expected that TBILL rate has an effect of diverting portfolio investment from stock to government securities. Being a risk free rate, higher TBILL rate lead to more investment towards government securities and thus lowering market capitalization when investors sell stocks to purchase government securities.

3.3.5 Percentage change in the exchange rate (E)

This variable is an independent variable, which is measured as the percentage change in the monthly exchange rate to the US dollar. The constant changes in the exchange rate create uncertainty in the market. The uncertainty reduces the confidence of the foreign investors in the

market, thus affecting the prices, either due to investors pulling out or because of uncertain returns in the future.

3.3.6 Market capitalization (MC)

Market capitalization is the dependent variable which is used to show how the foreign portfolio flows and other factors affect the capital markets in Kenya. Market capitalization is used to measure the size of the capital market. Higher capitalization shows a bigger capital market. Higher capitalization reflects how investors feel about the market. A high market capitalization shows that number of investors in the market is high, and returns are good.

3.4 Data sources and description

The analysis is done using the monthly data from January 2005 to June 2015. Data is sourced from Nairobi Securities Exchange as well as Capital Market Authority, which enlist the foreign portfolio flows in the domestic market. The data on the foreign trading at the Nairobi Securities Exchange shows how buys and sales are in the market between the foreign investors and local investors. On the source of the exchange rate data, this is from the Central Bank of Kenya, which publishes the exchange rates in the country. The Standard & Poor's Index is sourced from Wall Street publications and website as well as Bloomberg. Though the aim of the paper is to look into the effects of foreign portfolio flows on capital markets in Kenya, we investigate the links through domestic returns, foreign returns, and the relationship with interest rates and exchange rates.

3.5 Pre-estimation tests

For OLS method to hold, there are some assumptions that should hold. The study is carried out the following tests.

3.5.1 Stationary test

To test for stationarity of each series of variables, the augmented Dickey-Fuller (ADF) test is conducted. There is a need to make non-stationary time series data stationary in order to come up with meaningful results before the regression is done. If the results showed existence of unit roots, then they would be made stationary by differencing.

3.5.2 Cointegration Test

The test is done in case time series are non-stationary to determine existence long run relationships. In theory, cointegration exists when there is a long run relationship linking the variables together. Testing for cointegration is a necessary step to check if the model is empirically meaningful. The paper uses the Augmented Dickey Fuller test in testing for cointegration.

3.6 Post-estimation test.

3.6.1 Autocorrelation test

The OLS estimators are inefficient, and the estimated variables of the regression analysis will be inconsistent and biased, hence resulting in invalid results if there is autocorrection among the variables in the model. The test was done to ensure that there is no autocorrelation and that the OLS estimators were not biased. The Durbin Watson test was used in the analysis.

3.6.2 Normality test

This test is basically for ensuring that the variables used in the estimation of the model are normally distributed. It examines the likelihood of a data set to be modeled in a manner that there is normal distribution in the series. The paper used Shapiro-Wilk test in carrying out the normality test.

CHAPTER FOUR:

DATA ANALYSIS AND PRESENTATION OF FINDINGS

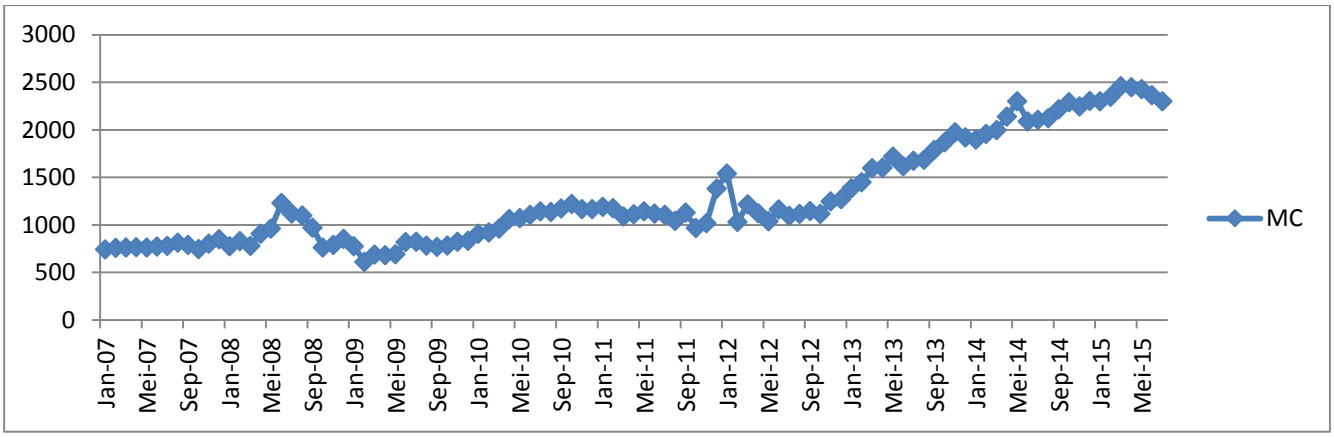
4.1 Introduction

This chapter comprises data analysis, presentation and interpretation of the findings. The data presented comprises data from January 2005 to June 2015. The paper used secondary data obtained from the Nairobi Securities Exchange and the Capital Market Authority as well as other sources. Though the aim of the paper is to look into the effects of foreign portfolio flows on capital markets in Kenya, it also investigated the links through domestic returns, foreign returns, and the relationship with interest rates and exchange rates. Both Descriptive and Inferential statistics using Stata data analysis software was employed in analyzing the findings of this research. Pre-estimation tests such as Stationarity and Cointegration Tests were also conducted.

4.2 Trends in market capitalization and portfolio flows

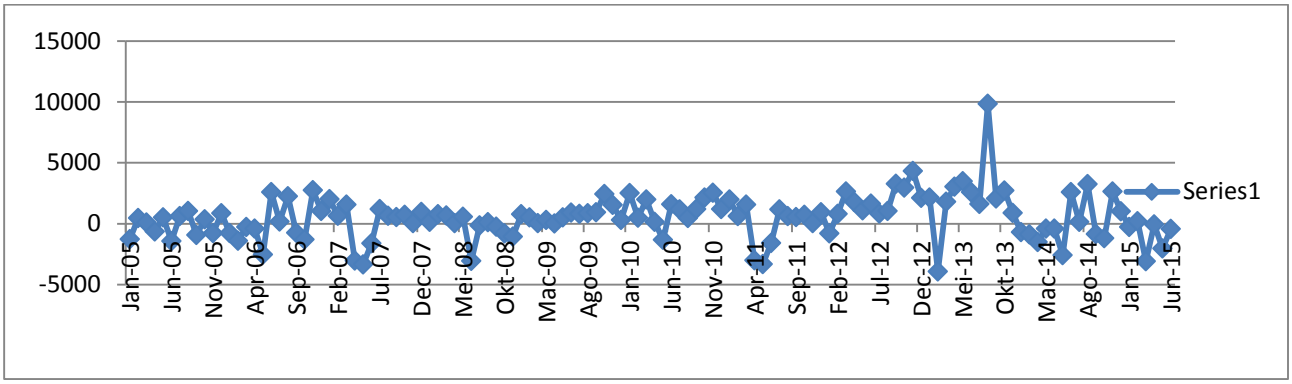
Figure 4.1 gives the average monthly market capitalization from January 2007 to May 2015. From the graph, the market capitalization was highest in March 2015 and lowest in February 2009.On average, market capitalization has been increase continuously overtime.

Figure 4.1: NSE monthly market capitalization from January 2007 to may 2015.



Considering the net foreign portfolio flows for the over the period, Figure 4.2 shows the level of volatility in the market with some months having negative net foreign portfolio inflows. The net foreign portfolio inflows have near zero values for most of the period. From this, we may ask whether foreign portfolio inflows have a great effects on the market capitalization in the Kenyan capital market. Market capitalization is used to measure the size of the capital market. It is therefore, possible to conclude that foreign investors' activities in Nairobi securities exchange do not have great effects on the size of the capital market. There activities do not contribute on average that much to the growth of the market capitalization in Kenya. Overall, net foreign portfolio inflows have been volatile over the sample period. This shows the level of uncertainty on foreign portfolio flows in the securities exchange. The bounds of volatility were higher during the period 2011 to 2015. During this period there was unpredictable growth in the levels of foreign participation in the securities market. This can be explained by the sharp decline the levels of participation in the year 2011 to 2012 and a sharp increase in the year 2013.

Figure 4.2 Monthly net foreign portfolio inflows



4.3 Descriptive statistics and correlations

The descriptive statistics are presented in table 4.1. The mean of the percentage change in the variables are positive. Some of variables are highly dispersed from the mean as seen from the standard deviation, with the highest dispersion being FPI of 751.708 compared to other variables. Half of the variables are positively skewed while half are negatively skewed. The positively skewed are FPI, TBILL and E. The negatively skewed are MC, ROID and ROIF. However, all the variables have relatively peaked distributions as shown by the positive Kurtosis. The highest peaked distributions are indicated for FPI and TBILL.

From correlation statistics, *MC* is positively correlated to *FPI, ROID, ROIF,* and *TBIl* rate as shown in table 4.2. For *TBILL* rate the expectation is that *MC* should be negatively correlated as high *TBILL* rate have the effect of diverting portfolio from Stock to government securities. However, the correlation is lowest among the four variables, meaning that it has a near zero effect. At the same time, the correlation of *TBILL* and *ROID* is negative. This can be interpreted as reducing the expected returns for investors who have stock portfolios. For *FPI,* a positive

change leads to an increase in *MC.* This means that when there is an increase in inflows and a decrease in outflows there will be a marginal increase in *MC. ROID* is positive. This means that when the returns in the domestic market are high, there will be a greater interest by foreign investors willing to participate in the domestic market as evidenced by the positive correlation with *MC.ROIF* is positively correlated with market capitalization. This implies that when foreign or international securities market performance improves it is likely that the domestic securities market is also improving. However, *E* is negatively correlated with *MC*. Increases in changes in exchange rate are expected to create uncertainties in the market. These scares away foreign investors who either move their investments to other markets that have more stable exchange rate to the US dollar or reduce their participation in the domestic market. The correlation of *E* to *FPI* is also negative meaning that as the exchange rates becomes unstable, more and more foreign investors avoid the domestic market.

Table 4.1: Descriptive statistics

	MC	*FPI*	*ROID*	*ROIF*	*TBILL*	*E*
Mean	1.521	117.812	0.012	0.459	1.454	0.650
Median	1.540	-35.999	0.686	1.058	0.058	0.281
Standard Deviation	8.717	751.708	5.785	4.556	15.830	5.326
Kurtosis	4.693	19.698	2.795	1.577	8.094	2.474
Skewness	-0.020	3.885	-0.754	-0.774	1.601	0.480
Range	68.660	6534.826	38.132	27.715	115.734	34.189
Minimum	-33.009	-1634.826	-22.637	-16.942	-46.309	-15.867
Maximum	35.651	4900.000	15.494	10.772	69.426	18.323
Sum	155.143	12016.838	1.259	46.861	148.356	66.312
Count	132	132	132	132	132	132

MC is the percentage change in the monthly security market capitalization; *FPI* is the percentage change in the net monthly foreign portfolio investments, *ROID* is the percentage change in the monthly NSE 20 share index, *ROIF* is the percentage change in the monthly S&P 500 index, *TBILL* is percentage change in the 90-days treasury bill rate, and E is the percentage change in the monthly exchange rate to the US dollar.

Table 4.2 Correlation of Variables

	MC	*FPI*	*ROID*	*ROIF*	*TBILL*	*E*
MC	1					
FPI	0.171	1				
ROID	0.502	0.081	1			
ROIF	0.207	0.145	0.503	1		
TBILL	0.038	0.018	-0.032	-0.017	1	
E	-0.1498	-0.1371	-0.2070	-0.0372	0.0202	1

MC is the percentage change in the monthly security market capitalization; *FPI* is the percentage change in the net monthly foreign portfolio investments, *ROID* is the percentage change in the monthly NSE 20 share index, *ROIF* is the percentage change in the monthly S&P 500 index, *TBILL* is percentage change in the 90-days treasury bill rate, and E is the percentage change in the monthly exchange rate to the US dollar.

4.4 Estimations.

4.4.1 Unit root test.

Table 4.3 presents the results of the unit root tests. Based on both Augmented Dickey-Fuller (ADF) test and Phillips –Perron test (PP). The confirmatory Kwiatkowski-Phillips-Schmidt-Shin (KPSS) test for stationarity was also conducted. From both tests, most of the variables are stationary at levels except for *E* which attains stationarity after the KPSS test. The values of ADF and PP are supported by those of KPSS where E attains stationarity.

Table 4.3 Unit root test

Variable	ADF		PP		KPSS	
	(1)	(2)	(1)	(2)	(1)	(2)
E	0.021	0.030	19.251	19.298	0.051	0.061
TBILL	-9.747	-9.795	-21.852	-21.892	0.023	0.025
ROIF	-2.494	-2.562	-2.648	-2.690	0.139	0.141
ROID	-3.022	-3.079	-8.231	-8.290	0.148	0.165
FPI	-9.034	-9.036	-35.461	-35.492	0.013	0.019
MC	-5.729	-5.799	-7.441	-7.500	0.094	0.110

Note: (1) represents with trend; (2) without trend. With trend, at 5% critical value, the critical values for ADF were -1.092, PP were -4.306 while KPSS were 0.181. Without trend, the critical values for ADF were -1.13, PP were -4.310 while KPSS were 0.212.

4.5. Presentation and discussion of econometric results.

This section extends the analysis of the previous sections by estimating the market capitalization model with the inclusion of the macroeconomics and proxies of the world variables as control variables which are essential in explaining the expected effects on market capitalization at NSE. The results of table 4.3 shows that all the variables estimated are stationary and have a long run relationship and therefore, they are valid in carrying estimating the regression model. The results of the estimated model are presented in table 4.4 where estimation is based on the percentage change of the level variables.

The results show that foreign portfolio investments (FPI) affect the securities market returns with an elasticity of about 0.002. This means that a percentage increase in foreign portfolio investment will lead to 0.002 percentage increase in market capitalization. this is because when the FPI enter the domestic market the increase the level of investment in the equity market. The results are consistence with the finding of Franxen et al. (2009). The authors, found that when

more foreign investors invest in the domestic market, they lead to an increase in the market capitalization.

Market capitalization is also affected by the domestic returns (ROID) with an elasticity of 0.793. This means that one percentage increase in returns in the domestic market, measured by the NSE 20 share index, will lead to 0.793 percentage increase in market capitalization. The results are consistence with the findings by Pachori and Totala (2012) who stated that stock market returns positively influence market capitalization. The paper also stated that higher returns in the domestic market attract more foreign investors.

The exchange rate (E) has a negative relationship with market capitalization with an elasticity of -0.043. This implies when the domestic currency depreciates with one percent, the market capitalization decreases by 0.043 percent. The depreciation of the currency leads to erosion of the gain by the foreign investors. The negative relationship between market capitalization with the exchange rate is also consistent with the findings by Lucey (2007). According to the author the frequent fluctuations of the exchange rate of the domestic market currency have negative effects on the stability of the asset prices in their dollar values.

ROIF and T-bill rate are insignificant in the estimation of the model. With values of 0.065 and 0.085 respectively, the variables are statistically insignificance at 5% significance level. This implies that variables are not statistically significant in explaining the changes in the market capitalization. This is consistent with the findings by Kenneth (2009) which argued that T-bill rate affects the bond market more and does not have a significant effect on the equities market. They also found that returns in the foreign markets do not highly influence the domestic market, if the markets are moving in the same direction.

The model shows that the dependent variables (FPI,ROID, and E) explain close to 65 percent of the dependent variable (MC). This is evidenced by the R squared of 0.65 as shown in table 4.4. These results are consistent with theoretical expectations as stated in Maharaj et al (2011). The authors said that foreign portfolio investments play a vital role in the growth of the capital market capitalization of the domestic markets. The continued to indicate that other macro economics factors such as returns in the stock markets and the exchange rate of the country affect the behavior of foreign investors and thus indirectly affect the level of market capitalization.

Table 4.4 Regression analysis summary output

	Coefficients	**Standard Error**	**t Stat**	**P-value**
Intercept	1.382	10.021	1.451	0.15
FPI	0.002	0.005	1.741	0.005
ROID	0.793	4.089	2.611	0.011
ROIF	-0.149	2.071	-1.866	0.065
TBILL	0.028	0.594	-2.909	0.085
E	-0.043	1.789	1.453	0.015

Regression Statistics	
Multiple R	0.54
R Square	0.65
Adjusted R Square	0.62
Standard Error	84.55
Observations	132

4.6 Diagnostic tests

4.6.1 Autocorrelation

Table 4.5 shows the results of the autocorrelation test conducted using Durbin-Watson test. The results show that there is near zero presence of autocorrelation in the times series data used in the regression analysis.

Table 4.5

Durbin- Watson Test	
Sum of the squared difference of Residuals	0.762
Sum of the Squared Residuals	0.645
Durbin Watson Statistic	1.98

4.6.2 Normality test

Shapiro-Wilk test was used to test for normality to show that the sample drawn follow the normal distribution. From the analysis presented in table 4.5 we do not reject the normality assumption for the sample. From the results, we conclude that the sample was normally distributed.

Table 4.6

Shapiro-Wilk test	
W	0.947
P-Value(Two tailed)	0.645
Alpha	0.05

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study, conclusion and recommendations that are drawn guided by the research objectives of the study. It also gives suggestions for further study.

5.2 Summary of the study

The main objective of this paper is to examine the effects of foreign portfolio flows on the capital market in Kenya. The specific objectives of the paper are to one, to determine the relationship between foreign portfolio flows and market capitalization in the capital market and two, to discuss the policy implications of the study. The empirical results on the effects of foreign portfolio flows on capital market in Kenya show that market capitalization is affected by net foreign portfolio inflows. Returns in the domestic market determine the level of participation by both local and foreign investors. Investments by local investors are as important as investments by foreign investors and they contribute the highest percentage of the total market capitalization. This is evidenced by the marginal effect foreign portfolio investments have on the market capitalization. It shows that if returns in the domestic market are high, more investors both local and foreign are attracted to invest in the domestic market. The returns in the domestic market reflects the levels of confidence local investors have on their domestic securities market. This in return drives more investments in the securities exchange and attracts foreign investors.

Macroeconomic factors such as exchange rate and the interest rate, are of significance in determining the participation of foreign investors in the securities market. The exchange rate

may create uncertainty in the market as the value of stocks is eroded due to depreciations. Foreign investors are most attracted to invest in markets that have relatively stable exchange rates. In relation to Treasury bill rate, the expectation is that when 90-day Treasury bill increases, more and more investors will divert their investments from stocks to government securities. Being a risk free rate, it pushes prices up in the market and as an overall positive effect on market capitalization, but a negative effect on returns in the domestic market.

The contribution of foreign portfolio investments in the Kenyan capital market is marginal as shown by the coefficient of FPI (0.002) in the regression analysis results in table 4.6. This means that foreign portfolio investments increase the market capitalization in the market when they come in but marginally. Has shown in figure 4.2, foreign portfolio investments are highly volatile and this shows that investors are not looking for long-term investments and cannot be highly relied on for the stability and growth of the capital market.

5.3 Conclusion

The increased rate of foreign portfolio flows in Kenya from the 1990s, as well as internalization of the capital market may be considered to be in its infancy from a global perspective. It can be argued that of the total volume of portfolio flows, only a small percentage represent a net shift of investment from the countries considered to be rich in capital to those considered to be poor in capital. This means that there remains bias in the portfolio of investors in rich countries, suggesting that there still is some level of gains for foreign investors from international diversification. However, from the results of the data analysis, portfolio inflows into the country are positively influencing the market, having a positive effect on the capital market in Kenya. With this therefore, it is essential to ensure that the domestic market is stable and that there is

increased investor's confidence in the market. Reducing market inefficiencies, as well as reducing uncertainties can go a long way in making the capital market in Kenya more efficient, lucrative and a more preferred destination for international and local investors.

From the results of the paper, we conclude that foreign portfolio investments are highly linked with the market returns. The impacts of the flows on returns are statistically different from zero. It is imperative to also accept that the foreign portfolio flows may cause harm to some sectors of the economy and some classes of assets especially those that do not directly benefit from the growth of foreign inflows.

Overall, the results of this study shows that foreign portfolio investments are associated with increases rather than decreases in the market returns. This leads to an increase in market capitalization. The variables which are statistically different from zero show that foreign portfolio investment are affected by other variables such as exchange rate and returns in the domestic market. Further studies can be conducted that examine how other macro economic factors affect foreign portfolio investment and ;linkage between market returns, foreign portfolio investment and market capitalization.

5.4 Policy implications.

The study clearly revealed that there is a positive relationship between FPI and capital market in Kenya, measured by their effects on market capitalization. Capital inflows from the international market have the ability to increase the capital stock in the market by boasting local savings, thus stimulating economic growth. The Kenyan Vision 2030 blueprint places substantial emphasis on the securities market as a way of attracting investment for economic growth. To achieve this

increase in inflows, there are some recommendations that should be taken into consideration. For one, investors, both foreign and local, should be able to look at the trends in the macroeconomic factors when they are considering their investment decisions. Portfolio inflows will lead to an increase in the liquidity in the market leading to higher demands for stocks thus increasing prices.

The results of this paper show that there is a need to implement more strategies and regulations that create an enabling environment for foreign investors. Considerations should be given aimed at improving local investments as well as ensuring macroeconomic stability. This will increase the confidence levels of foreign investors by reducing the uncertainties and drive capital market growth. The capital market in Kenya is liberalized and it is also very important to consider the effects of this on its performance.

The paper also recommend that further research can be done on this topic in the sub-Saharan markets as most of the studies seem to concentrate on emerging markets. More studies on this topic will be highly essential and useful to policy makers, investors, and analysts as the country aims to achieve the emerging market status.

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