DETERMINANTS OF FOREIGN DIRECT INVESTMENT IN KENYA.

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REG.NO. D63/63351/2011

A RESEARCH SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT OF MASTER OF SCIENCE (FINANCE) UNIVERSITY OF NAIROBI

NOVEMBER 2012

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Declaration

This research project is my original work and has never been presented for degree in any other university.

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

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Dedication

To my parents Mr. Ernest & Mrs. Apofiah Kinuthia and my sister Hellen Kinuthia.

ACKNOWLEDGEMENT

Glory to God for His faithfulness. I acknowledge with gratitude the invaluable advice and assistance given to me by various people during the entire duration of my study. It is not possible to mention all the people who have enormously contributed to this research report. I wish to however, mention the following individuals for their tremendous assistance.

I wish to express my indebtedness to my dedicated supervisors, Prof. Herick Ondigo for his advice, guidance, encouragement and positive critique in the course of this study. Special regards also goes to my fellow classmates, who challenged me to think out of the box. Also I would like to thank the administrative staff department of University of Nairobi, School of Business, Finance department for giving me the opportunity to learn more about finance.

I wish to sincerely appreciate my entire family and friends I salute you all for your encouragement and prayers.

Table of Contents

List of Tables

Abbreviations

EPZ	Export Processing Zone
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
ICT	Information and Communication Technology
MNC	Multinational Companies
NSE	Nairobi Securities Exchange
OLS	Ordinary Least Squares
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme

Abstract

The objective of this study was to analyze the relationship between capital flows and Foreign Direct Investment (FDI) in Kenya.The study establishes the primary factors responsible for affecting capital flow in Kenya in relation to Foreign Direct Investment (FDI) in Kenya. Furthermore this paper attempts to investigate the relative influence of these factors to FDI. With the help of multiple regression model and Factor analysis the primary factors are traced out.

In thestudy, the determinants of foreign direct investmentwere established and estimated. Multicollinearity problem is taken into consideration among different independent variables and there is an attemptto eliminate them. Statistical methods were used to do the analysis based on yearly basis database of different economic factors. Finally some relationships of those factors with FDI inflow were found. In the context of Kenyan economy, decrease of external debt and inflation will bring in more foreign exchange reserve which will act as stimulant to foster growth.

One of the recommendations wasgovernment policies should be directed towards improving the fundamentals of the economy, such as Gross Domestic Product and total external debts, if the intention is to attract capital inflows.Also, monetary policy should be managed accordingly so as to control inflation rates. Finally,contractionary measures should be adopted in the fiscal policy so as lower real interest rates. As for recommendations to academia, it was established that Current account is irrelevant in determining the FDI inflows in Kenya. Also, the study recommends multiple

regression analysis and factor analysis as statistical methods of choice when analyzing capital flow determinants.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Success or failure of business in the 21st century will depend on whether it can compete effectively in world markets. The days when business waits for clients to beat a path to their doors is long gone Ohmae(1995). Therefore according to Porter (1985) businesses are creating sustainable competitive advantage by exploring new markets. With the help of globalization, firms have started exploring new markets, especially in economies that are growing. Most of the developed areas such as euro area have stagnated growth while the developing economies such as those in the Sub Sahara Africa have been enjoying growth. In the World Bank's report on GDP annual growth for 2010 euro area grew by approximately 1% compared to Africa which grew by 5% in year 2010. This indicates that Africa's economy is growing faster than that in Europe.The dream of the corporate empirebuilders is being realized. The global system is harmonizing standards across country after country down towards the lowest common denominator (Korten, 1995). This has attracted multinational companies as well as other investors in investing in Africa especially Kenya thus enhancing economic globalization through foreign direct investment in developing countries in Africa such as Kenya.

1.1.1 Foreign Direct Investment

Foreign direct investment (FDI) is regarded as a factor that drives economic growth (Wang, 2009). It is established when a firm takes a controlling interest in a foreign company or markets its products in a foreign country or when a firm invests directly in facilities to produce products (Daniels, 2009) .

Gachiri (2012) observes that, foreign investor participation has made the NSE the second highest return after the Ugandan Securities Exchange.This indicates that FDIs have important positive effects on a host country's development effort. Agosin and Mayer (2000) mention that FDI acts as a catalyst for inward investment by complementing local resources and providing a signal of confidence in investment opportunities. Borenstzein (1998) points out that FDI's are tools of economic development, prompting most countries to strive and attract them because of their acknowledged advantages such as augmentation of existing stock of capital, technology, marketing and management.

1.1.2 Capital Flow

International Monetary Fund (1992) defines capital flows as consisting of direct investment, portfolio investment, other long-term and short-term capital flows and reserves and liabilities constituting foreign authorities' reserves. Capital flows assist in the suitable distribution of global resources which increases the availability of capital and thus higher investment and growth. They also enhance transfer of technology and management skills, risk sharing with the rest of the world and promote external market discipline on macroeconomic policy. (World Bank, 1995). The integration of capital markets has strengthened incentives for international coordination of economic and financial policies. (World Bank, 1995).

Massive capital inflows may also lead to excessive money supply changes. This may cause pressures on prices and the exchange rate, and deterioration in the current account balance. Other associated dangers of foreign investment are reduced scope for independent macroeconomic policy actions,

greater exposure to external shocks, demands for protection in local markets and some loss of control of foreign owned domestic industry, (World Bank, 1995).

1.1.3FDI and Capital Flow

Foreign Direct Investment is increasing in this age of globalization. It has played important role for economic growth in this global process. Korten (1995) argues that, FDIs are regarded as predominantly a source of finance, which has impact on the balance of payments and macroeconomic management of the global economy. FDIs have become a driving force in the economic liberalization. FDI promotes industrial restructuring, optimum distribution of global resources and enhances innovations in technology. A foreign direct investment (FDI) inflow plays a critical role in explaining growth of recipient countries (De Mello, 1992).

1.1.4 FDI in Kenya

Multinational entities have played a major role in international trade for several centuries. A number of multinational corporations (MNCs) from developing economies are becoming key players in the global economy (Ogutu, 2010). With the development of infrastructure in Kenya such as improvement of the transport network as well as establishment of the undersea fiber optic cable, foreign investment has significantly improved.

Kenya is an economic leader in East and Central Africa. It is dependent on Foreign Direct Investment (FDI) for capital and employment. Remittances are Kenya's single largest source of foreign exchange. According to the Central Bank of Kenya, remittance totaled $611.2 in 2010.

Unfortunately for Kenya, being a developing country and in the third world, investments have not been flowing in compared to other nations such as South Korea and Malaysia who in the 70's were at level in terms of economic growth. Luiz (2006) noted that the economic reality for Africa is that it is a tiny player on the world stage one that is easily ignored and one that is increasingly facing marginalization. The despairing reality is that Sub Sahara African countries feature prominently amongst the most risky and unattractive investment destination on the globe with no apparent signs of improvement other than increased investment in the extractive sector, edging the continent to the brink of becoming a lost opportunity, while the rest of the world marches on to greater levels of prosperity (UNCTAD, 2004). The fact that Kenya has a reputation as one of the most corrupt places on earth, and generally features at the wrong end of any global ranking scale, worsens its regional image. This is also illustrated by the United Nations Development Program's 2003-2004 rankings in terms of the Human development Index (UNDP, 2004). All this paints a very grim picture one that is very unattractive to investors.

Despite all this shortcomings, all hope is not lost and the unattractiveness represents a large and untapped opportunity for investors with an appetite for risk. There have been a lot of donor funds which to some extent has been fatigued as a resource for long term development and the region now has to depend on FDI for so many reasons as noted by Asiedu (2001).

1.2 Statement of the Problem

In the last eight months (to September 2012) Kenya has had a dramatic recovery since the inflation of November and December 2011. The securities markets have had a tremendous recovery, based on their indices. The Kenyan shilling has also recovered compared to the U.S. dollar, the Euro and

the British pound. Analysts in the Kenyan markets have attributed it to foreign investment. It is important to take note that the Government, through the Central Bank of Kenya, implemented some corrective measures through theMonetary Policy. So as to curb the effects of inflation, the Central Bank of Kenya adjusted the interest rates so as to adjust forces of demand and supply on the Kenyan shilling. This in turn attracted investors who wanted to capitalize on the high interest rates in the Kenyan markets and some of those investors came from the foreign countries. There effects were felt squarely in specific industries such as the banking industry, the ICT sector and insurance industry.

Big corporations have also set up shop in Kenya in the recent past. Africa Development Bank moved from Tunis to Nairobi, General Electric which is a blue chip company in the U.S.A. has also made their presence in Kenya. These two organizations are just a fraction of major organizations being headquartered in Nairobi. Some academicians speculate that some of these companies are in the country just to make a presence while others speculate that they are enjoying low cost of business. It might be true as for establishment of their presence, since Kenya is strategically located in geographical terms. As for low cost, that is debatable because according to UNCTAD report of 2010, Tanzania and Uganda have lower operational cost than Kenya yet a lot of MNC and FDI are making way into the republic of Kenya.

Gumo (2009) checked on the relationship between the companies listed in the NSE market and globalization. She was measuring the effects of globalization on growth. Munyoki (2010) studied the role of Kenya investment authority in attracting foreign direct investment in Kenya. In this study, Munyoki was keen on the development of the Kenyan markets. He analyzed the financial sector and the manufacturing sector and also looked into the Greenfield Investment where there is

investment on establishment of new fixed assets such as buildings and Brownfield investment where there is investment on already existing fixed assets.

Kinuthia (2011) did a study on the impact of tax incentives on the flow of foreign direct investment in the manufacturing sector in Kenya. He analyzed the bottle necks that are in the tax laws of Kenya as well as the benefits given to businesses established through FDI. All this studies have something in common. They are very keen on growth and development brought about by FDI as well as benefits brought about by FDI. Gumo also established that FDI is a benefit arising from economic and financial openness of the Kenyan market.

Therefore all this factors invoked the thought that Kenya is one of the last frontiers of growth through FDI as well as establishment of Multinational companies. In the 1980's as well as in the 1990's Kenya was very unattractive due to mainly the political regime and policies set. From 2002 when a new political regime was established there has been significant growth in MNC and FDI. Also, Kenya implemented an economic Recovery Strategy Paper which later on was replaced by vision 2030 after it expired in 2007.Vision 2030 was launched as Kenya hopes to achieve global competitiveness and prosperity of the nation.

Kenya serves as the East African business hub for many international companies such as General Motors, Proctor & Gamble, Coca-Cola, Microsoft and Citibank. A third of Kenyan banks are foreign owned, controlling 51% of total banking assets in the country. Safaricom for example, is 40% owned by Vodafone of the U.K. There has also been significant activity in the Nairobi Securities Exchange from FDI. In January 2012 the Nairobi 20 share Index was approximately 3100 but as of July 2012 there was a significant leap to more than 3800. This improvement was

attributed to massive FDI inflows.Therefore all this begs to ask; what are the determinants of capital flow in Kenya?

1.3 Objectives

The objective of this study is to establish the determinants of FDI inflows in Kenya.

1.4 Value of the Study

This research will help in addressing the existing knowledge gap in literature of economic globalization in Kenya. It will also be a valuable addition to the existing knowledge and provide a platform for further research which will be useful to academicians and scholars.

It will also enhance understanding of FDI flows by managers, investors, and other stakeholders. It will also help in providing current and timely information necessary to address the current issues in various industries in Kenya which are affected by FDI.

The study may also help the government to have some sense of control on the operations of different stakeholders in the sector. A clear picture of the FDI flows can be painted which may help in doing comparative analysis with other developing countries. Policy makers may use the findings to overcome disadvantages as the study outlines the potential strengths and weaknesses of Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter contains the literature review on the subject matter. It consists of theoretical review, effects of FDI, initiatives taken to attract FDI in Kenya, empirical review and conclusion where the gap is established.

2.2 Theoretical Review

There have been a lot of theoretical studies on the determinants of FDI attraction which largely remain inconclusive, with a majority emphasizing on, among others, governance failures, problems of policy credibility, macroeconomic policy failures and poor liberalization policies as deterrents to FDI flows. Some of these theories are:

2.2.1 Eclectic Approach Theory

Eclectic approach theory by Dunning (1993) is one of the most widely accepted theory of FDI, which argues that an FDI is only attractive if the Ownership, Location and Internalization (OLI) conditions are met. First, there must be an ownership advantage for the multinational compared to ownership by local firms. This may be in form of specific technological or organizational knowledge of the multinational. Potential influence of government policy on the benefits of investing and doing business in a specific host country is also potentially important. In some cases the host government may pose restrictions on the extent and nature of foreign ownership. Such restrictions in effect reduce inflows of inward FDI and in essence the technology that would accompany those inflows. 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 attractive to undertake activities within the host countries, rather than buying or leasing them from other firms. This view is shared by other researchers such as Koima (2011), King'ola (2011), Rono (2010), and Kamau (2010) who argue that such conditions hinder chances of foreign investors to operate successfully thereby increasing FDI unattractiveness. This general factors illustrates considerations that firms take when they are thinking of making direct investments in foreign countries (Venables, 2000).

2.2.2 Theory of Convergence

The convergence in economics is the hypothesis that inferior economies will be likely to grow at a faster rate than richer economies. Eventually all economies will converge in terms of per capita income. Due to diminishing returns especially to capital, developing countries have the potential to develop at a faster rate than developed countries. This is so because diminishing returns of the developing countries aren't as strong as in capital rich countries. (Baum 1974).

FDI can be considered as effective channel for convergence. FDI enhances technology diffusion which incorporates transfer of capital goods, knowledge and managerial skills. Moreover the foreign involvement tends to hasten diffusion when it is possible to assume that the costs of adapting a technology are smaller for those who are more familiar with how the idea operates in the country of origin of the firm (Venables, 2000).

2.2.3 Heckscher-Ohlin Model

The Heckscher Ohlin model is a model developed by Eli Heckscher and Bertil Ohlin at the Stockholm School of economics. It is a mathematical model that predicts patterns of commerce and production through the factor of endowments of trading region. The model says that countries will export products that use abundant and cheap factors of production and import product that use the countries limited resources. **(**Ramachandran, 2005)

2.2.4 The Kojima Hypothesis

Kojima (1985) saw FDI as a means of transferring capital, technology and managerial skills from the source country to the host country.Kojima categorized FDI into two kinds. The first is trade oriented whereby there is an excess demand for import and excess supply of export at the original terms of trade. This kind of FDI leads to improvement of welfare in both countries. Also, it would normally imply investment in industries which the source country has a comparative disadvantage. This would enhance trade in both countries.

The second kind of FDI is the anti-trade oriented FDI which has exactly opposite effect to those of the first kind. This kind of investment is less trade oriented, and it has an adverse effect on trade and it also promotes unfavorable restructuring of industries in both countries. Kojima argued that Japanese FDIhas been trade orientated but not so the FDI of the USA. Therefore Kojima hypothesis is based on how trade is complimented by FDI, and it emphasizes the need for considering comparative costs.

2.3 Effects of FDI

FDI flows have significant effects on the society and policies of the host countries. They also affect the GDP and growth of an economy.

2.3.1 Socio-political effects on FDI

African leaders did not fully embrace the idea of FDI as an essential feature of economic development until recently. They were afraid that it could lead to the loss of political sovereignty, enhance bankruptcy to domestic firms due to increased competition and lead to environmental degradation in businesses such as mining (Kobrin, 2004). Todd, Ramachandran and Shah (2005) argue that much of African skepticism toward foreign investment is rooted in history, ideology, and the politics of the post-independence period. They also mention that the current concerns in the region are because of the fact that policymakers in the region are not convinced that the potential benefits of FDI could be fully realized in the region. However studies done on FDI in other regions show that the sector in which a country receives FDI may lead to realization of its potential benefits. In East Asia, substantial FDI went into the secondary sector thereby contributing to the diversification of the export base and to a higher and sustained growth (Galina, 2007). Africa receives FDI mostly in the primary sector, and so the benefits to the region have not been as significant as in East Asia.

2.3.2 Effects of FDI on GDP Growth.

Current annual GDP growth in the region is well ahead of the global average, second only to Asia. Efforts by the Sub Saharan community has seen a steady growth of about 5.6 per cent between 2001 and 2011, thanks to a combination of structural economic and political reforms,

stable macroeconomic conditions and increased foreign direct investment (UNCTAD 2011). According to Hambara (1994) Inflows mainly from emerging economies have since come to an end giving a relatively extended period of peace and stability and has seen current private equity investment flows into the region surpass that of foreign aid for four years running. Also, the current discovery of oil has been a catalyst for the country's growth. Kenya as one of the last frontiers for investment in Africa, appeals to potential investors for a host of reasons, as demonstrated by the numerous studies (Gumo, 2009; Rono, 2010; Kamau 2010). Africa represents the final untapped frontier for FDIs in search of such opportunities and new growth markets.

2.4 Initiatives taken to attract FDI in Kenya

All African countries are trying to attract FDI for different reasons such as; trying to overcome shortage of resources such as capital, access to foreign markets, efficiency in management techniques, technological advancement and employment creation. In their attempts to attract FDI, African countries design and implement policies, build institutions and sign investment agreements. These benefits of FDI to African countries are difficult to assess and differ from sector to sector depending on the capabilities of workers, firm size, and the level of competitiveness of domestic industries (Hambara,1994)

Therefore for this to occur Hambara suggests that several strategies have to be implemented. These strategies are: Investment treaties, Investment promotion, Incentives.

2.4.1 Investment Treaties

These are express agreements entered into between two or more countries to enhance trade and investment protection provision in their free trade agreement. Increasingly countries have entered into investment treaties, both bilateral investment treaties and multilateral ones. The bilateral treaties create a favorable investment climate between two countries by providing assurance and guarantees to investors. Bilateral investment treaties contribute to the establishment of favorable investment climate because they include the following: Fair and equitable treatment for foreign investors in terms of applications for investment approval and setting up their businesses, Specific provisions on expropriation and non-commercial losses and compensation for the same, and Dispute or conflict settlement mechanism.

2.4.2 Investment Promotion Agencies

Investment promotion agencies sole purpose is to market a host country as a destination for good investment. They are used to attract FDI to the host country. They have two main roles this are: by changing or modifying investor perception of the country by attending and organizing investor fairs and by distributing materials, Investment promotion covers a range of activities, including investment generation, investment facilitation, aftercare services, and policy advocacy to enhance the competitiveness of a location.

Promotions of this nature are very beneficial especially in attracting export oriented FDI. More often than not a significant portion of the FDI resources is used to for targeting investors. This to some extent is very efficient but it involves certain risks such as: The process of investor targeting may not integrate the overall development strategy of a country, Resources may be

targeted towards investments that do not materialize. Also, the promotion may attract the wrong types of firms.

Such risks requires that investment promotion agencies work closely with other parts of government to identify and create comparative advantages that are sustainable and that developmental policies do not offset each other. Targeting needs to be a continuous process and should not be taken as a once off initiative.

2.4.3. Incentives

Incentives are policies used to attract internationally mobile investors. Through the EPZ program, African countries offer incentives to attract foreign investment in the form of tax holidays, exemptions on export and import duties, subsidized infrastructures, and limits on workers' rights. Jauch and Endresen (2000) argue that, opinions about the importance of incentives vary significantly. Governments consider them as an avenue to acquire FDI whereas transnational corporations perceive EPZs as providers of favorable investment sites. African countries have enhanced their regulatory frameworks for FDI by opening their economies, providing tax and permitting profit repatriation to draw investment. Most African countries have concluded bilateral investment treaties with countries whose main aim is the protection and promotion of FDI. (Hambara, 1994).

2.5 Measures of Economic Openness.

There are two type of economic openness this are:

2.5.1 De Jure

De juremeasures of financial globalization are established on the IMF's Annual Report on Exchange Arrangements and Restrictions (AREAER). It mirrors the legal extent of capital account convertibility. De jure measure is based on the extent of restrictions on capital account transactions. Such capital controls come in form of controls of inflows versus controls on outflows, quantity controls versus price controls and restrictions on foreign equity holdings.

2.5.2 De facto

One of the defacto measures of financial globalization is use of price differentials. True integration of capital markets should be reflected in common prices of similar financial instruments across national borders irrespective of the volume and direction of flows. However, there are serious practical problems in using such measures for developing economies. Returns on financial instruments in these economies may incorporate a lot of risks that are difficult to quantify. An example of such risk is stocks of firms in many emerging market economies trade at low price earnings ratios due to concerns about corporate governance. Yet, it is not easy to separate this form of segmentation from differential pricing due to high project risk (Ahyan et al, 2006).

Therefore quantity based measures, which is the second approach of defacto measure of integration, is based on actual flows which tend to be the best available measure of a country's economic globalization. One of the commonly used measures of trade openness is the sum of imports and exports as a ratio to GDP. However, such annual flows tend to be quite volatile and are prone to measurement error.

2.6 Capital Flow Determinants

Factor affecting capital inflows can be grouped into three major categories: increases in the domestic money demand function, increases in domestic productivity of capital and external factors, such as falling international interest rates. The first two are usually referred to as pull factors, the third as push factors.

The single most important factor that affects capital flows is the government's policies on capital liberalization (Calvo & Reinhart, 1998). Full account convertibility increases a country's attractiveness to foreign investors.

Empirical studies of the effects of certain economic variables on investment in Argentina, Chile, Mexico and Venezuela indicated that the most significant variables in explaining investment behavior were Current account, Gross Domestic Product annual growth rates. Raise in FDI goes hand in hand with the development of structural reforms (Sanchez, 1996)

Other empirical studies done on developing countries show that there is negative relationship between inflation and capital inflows (Ahn, Adji & Willwt, 1998). An effective inflation stabilization program can significantly reduce macroeconomic risk and stimulate capital inflow. (Calvo & Reinhart, 1996)

Current account is also another determinant. When capital flows are restricted the capital account responds to offset any imbalances in the current account. Therefore the current account and capital account move in the opposite directions. (Calvo & Reinhart, 1996). This negative

relationship does not hold because the autonomous movement of capital can dominate the capital flows (Wang, 2001)

Gross fiscal deficit also is another determinant of capital flow. As the level of the country's fiscal deficit goes up, it is matched by increased capital inflows meaning that the country is financing its deficit by different forms of investment such as direct portfolio investment, foreign direct investment or other forms of capital inflow (Calvo & Reinhart, 1996)

Foreign Exchange reserves also acts as a determinant of capital flow. Studies done in developing nations such as countries in Latin America and South East Asia show that there is a positive correlation. As the level of foreign exchange reserves go up it stimulates the economy, raising international confidence in the country's economy and thereby accelerating capital inflows. (Sanchez, 1996)

2.7 Empirical Review

Early empirical studies concluded that the competitiveness of countries that export depended heavily on the technology of the domestic firms in the host country (Herbamas, 1984, Astley, 1985). New trade models found some evidence that the activities of MNC's also played an important role in improving the export competitiveness of the host country (Blomstrom, 1990 and Blomstrom and Kokko, 1997). According to many models used in measuring Financial Globalization, such as the Kearney Index and KOF index, export has been used as amajor indicator. The MNC's have better access to information and marketing networks of their parent

firms and easy access to advanced technology and trademarks, (Blomstrom, 1990 and Blomstrom and Kokko, 1997).

There are empirical studies that have employed the descriptive approach. One of these approaches is the Kojima's hypothesis that states Japanese FDI is more trade-oriented than US FDI (Kojima, 1985). The second study of descriptive approach investigates differences between foreign and local firms in a host country with respect to their trade orientation. The tools used in this study are export sales and foreigninputs-total inputs ratios (Fukuyama, 1992)

Fukuyama (1992) comments on the Kojima hypothesis by arguing that the direction of Japanese outward FDI has been dictated mainly by lack of raw materials at home, the need to take advantage of low wages elsewhere, and by policy of limiting environmental pollution at home. Kojima Hypothesis is not so much of a theory explaining FDI, but more like a prerequisite for establishing foreign trade.

FDI flows have become one of the main forms of new flows into developing economies. According to Ayhan (2009) the share of debt in gross stocks of foreign assets and liabilities declined from 75 percent in 1980–84 to 59 percent in 2000–04For developing countries, the share of FDI rose from 13 percent in 1980–84 to 37 percent in 2000–04, reflecting the wave of mergers and acquisitions in developing countries (Ayhan, 2009). Quinn and Toyoda (2008) also document a positive association between FDI inflows and economic openness. In studies that use both de jure and de facto measures, specifications where capital account openness is measured

using de facto measures tend to lend more support for the potential growth enhancing effects of financial integration than those employing de jure measures (Ahyan, 2009)

Carkovic and Levine (2005) provide a comprehensive analysis of the effects of FDI.They conclude that FDI has no robust causal effect on economic growth. However, their baseline results suggest a positive association between FDI and economic integration. Thus the Carkovic-Levine results could be taken to imply that FDI flows accompanied by an increase in trade could indeed enhance growth and economic integration.

2.7 Conclusion

Most studies and theoretical reviews analyze roles of FDI in growth of an economy. Gumo (2009) and Munyoki (2009) concentrated more on development and growth of the financial markets. Most theoretical reviews such as Dunning's Eclectic Approach theory and the Heckscher-Ohlin model analyze more on ways in which MNC's choose areas where they establish their subsidiaries. This in essence creates a platform for the host countries to improve the environment so as to attract more FDI.

FDI has been viewed as a benefit arising from globalization. It is more of an outcome rather than a contributing factor to the process of globalization (Blomstrom, 1990). In Kenya FDI has been more of a contributing factor towards the achievement of financial globalization. Kinuthia (2010) notes that, FDI not only contributes to the growth of an economy but also to the financial openness of an economy. Over the period of 1980 to 2002 Kenya has been an unattractive destination for investment but since 2002 when the recovery strategy paper was established

Kenya has been attracting a lot FDI which has led to economic globalization. Kenya could be one of the last frontiers for financial and economic globalization through FDI and establishment of MNC's. Therefore this study tries to establish the extent to which this occurrence is true and to bridge this knowledge gap that concentrates more on growth and development rather than capital flow determinants.

CHAPTER THREE

Research Methodology

3.1 Introduction

This chapter described the procedure that was followed in conducting the study. It contains the research design, the population, data collection and the data analysis.

3.2 Research design

In this study Multiple Regression andFactor Analysis was used. This was to investigate the relative influence of the factors affecting capital flow in Kenya and thereby categorizing them. In this study determinant of capital flow and FDI, which is a phenomenon is being studied. Jackson (2009) observes that factor analysis and multiple regression allows one to present data in a more meaningful way which allows simpler interpretation of the data.

3.3 Population

The targets of this study are all direct capital owned by non-residents in Kenya between 1992 and 2010. The FDI data was collected from World Bank data bank and International Monetary Fund's data and statistics. Budget deficit was used as a proxy for the gross deficit which was calculated from data collected.

3.4 Sample Size Selection and Procedure

Data analyzed was for the whole of Kenya as of 1992 to 2011. This was done through analysis of secondary data.

3.5 Data Analysis

A Multiple Regression Model is fit to the data set and an analysis is carried out to examine the impact of the determinants affecting capital flows and at the same time computing the degree of association among the determinants. Further Factor Analysis is carried out to categorize the determinants into groups. Eventually the crucial factors are traced out using the above methodology. The following is the multiple regression model.

$FDI = \beta_0 + \beta_1 Rir + \beta_2 Inflation + \beta_3 Debt + \beta_4 GDP + \beta_5 Openness + \beta_6 Current + \beta_7 Reserve + \varepsilon$

FDI: FDI inflows (US$ Millions)

Rir: Real interest rate (%)

Inflation:Rate of Inflation GDP deflator (%)

Debt: Total External Debt (US$ Billions)

GDP: Market Size of the economy captured by Gross Domestic Product (National Currency i.e. Ksh)

Openness: Degree of openness of the economy = (Exports + Imports)/GDP at current market prices (US$)

Current account: Current Account Balance

Reserve: Foreign Exchange Reserve (US $ Billions)

Multiple regression can establish that a set of independent variables explains a proportion of the variance in a dependent variable at a significant level (through a significance test of R2), and can establish the relative predictive importance of the independent variables (by comparing beta weights).

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSION

4.1. Introduction

In this chapter Data Analysis, the results and discussion will be done

4.2 Findings

The sample includes data of FDI inflows, Real Interest Rates basis for the period from Year 2002 to Year 2011.

4.2.1 Regression Analysis

Table 4.1: Model Summary (a)

Model	R	R Square	Adjusted R Square
1	0.797	0.635	0.402

The impact of the determinants affecting FDI inflow has been captured statistically by the multiple regression models. The regression output reveals that 63.5% of the variation in FDI inflow can be explained by the determinants taken under study. This is confirmed by the F statistic at 5% level. The remaining 36.5% is left unexplained.

Table 4.2: Coefficients

Factors	Coefficients	Standard error	T-stat	Significance
(Constant)	-555.121	482.481	-1.151	.274
real interest rate	13.536	9.137	1.481	.167
Inflation	6.854	7.456	.919	.378
external debt	184.462	79.004	2.335	.040
GDP	-1.013	.329	-3.084	.010
FX reserve	7.479	2.040	3.666	.004
Openness	-8.930	5.121	-1.744	.109
real interest rate	-65.036	104.024	-.625	.545
Current account	-555.121	482.481	-1.151	.274

In spite of high R2, the OLS estimates may have large variance and covariance. This reflects the association among the independent variables. The presence of multicollinearity problem within the data set is evident from the above result. This calls for diagnostic tests to affirm the presence of the problem. Therefore we go for correlation matrix.

Table 4.3: Correlation Matrix

	real interest rate	Inflation	external debt	GDP	FX reserve	Openness	Current account balance
real interest rate	1.000	-.645	-.352	-.197	-.270	-.315	.170
Inflation	-.645	1.000	.133	-.420	-.408	.201	.189
external debt	-.352	.133	1.000	.576	.488	.497	-.710
GDP	-.197	-.420	.576	1.000	.970	.234	-.844
FX reserve	-.270	-.408	.488	.970	1.000	.289	-.754
Openness	-.315	.201	.497	.234	.289	1.000	-.286
Current account	.170	.189	-.710	-.844	-.754	-.286	1.000

When the values of r are less than -0.7 or more than 0.7 then the independent variables are highly correlated to each other. So there is no way of disentangling the separate influence of the variables. The determinant value close to 0 confirms high correlation between independent variables. From the above table high correlation exists and therefore further factor analysis is carried out to remedy this problem.

Table 4.4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.574
Bartlett's Test of Sphericity	Approx. Chi-Square	117.508
	df	21
	Sig.	.000

The KMO Bartlett Test Statistic is equal to 0.574 which exceeds 0.5 and hence, the Null hypothesis of spherical matrix is rejected. This conclusion is further supported by Bartlett Test of sphericity where the $\chi 2$ statistic is significant at 5% level. Hence non spherical correlation matrix confirms the presence of multicollinearity.

4.2.2 Factor Analysis

So to reduce the severity of the problem and to eliminate it we have to go for data reduction with through factor analysis. There by using the extraction method via Principal component analysis the communalities are computed.

Table 4.5: Total Variance Explained

Component	Percentage of Variance	Cumulative Percentage
1	50.175	50.175
2	27.552	77.727
3	10.804	88.530
4	7.641	96.171
5	2.780	98.951
6	.894	99.845
7	.155	100.000

According to total variance explained matrix the first two components explains 78 % of the change in the independent variables. Since there exists a combination among independent variables within this data set as confirmed by the previous tests, data reduction is necessary. In this regard the original data set is converted to groups on the basis of principal components. This is done by extraction method under factor analysis.

Table 4.6: Component Matrix

Factors	**Component 1**	**Component 2**
real interest rate	-.348	-.781
Inflation	-.203	.931
external debt	.779	.315
GDP	.938	-.271
FX reserve	.909	-.231
Openness	.476	.465
Current account balance	-.901	.096

Table 4.7: Rotated Component Matrix

Factors	**Component 1**	**Component 2**
real interest rate	-.138	-.844
Inflation	-.434	.848
external debt	.672	.504
GDP	.976	-.023
FX reserve	.938	.008
Openness	.342	.571

Current account balance	-.895	-.137

The component matrix table shows External debt, GDP, Foreign Exchange Reserve, Openness of the economy and current account balance will be included in Component 1 and Real Interest Rate, Inflation and Openness of the economy in component 2. Since Openness of the economy belongs to both the components with different Loadings we have done rotation. Loadings less than +0.4 or more than – 0.4 are not considered.

After rotation, loading of factors corresponding to different variables changes their corresponding values. The corresponding matrix represents two components which includes the variables on the basis of Varimax rotation method. According to this matrix GDP, Foreign Exchange Reserve and current account balance belongs to Component1 and Real Interest rate and Openness of the economy belongs to component 2. Inflation and External Debt is included in both components. Further regression analysis is conducted between regression factor score1 with respect to corresponding variables i.e.; GDP, Foreign Exchange Reserve and current account balance.

Table 4.8: Model Summary (b)

Model	**R**	**R Square**	**Adjusted R Square**
1	0. 946	0. 896	0. 875

Table 4.9: Coefficients (a)

Factors	Coefficients	Standard error	T-stat	Significance
(Constant)	-1.083	0.342	-3.166	0.006
GDP	0.000	0.001	-.502	0.003
FX reserve	0.014	0.004	3.175	0.006
Current account	0.126	0.251	0.503	0.003

While considering Factor score1, the model yields better goodness of fit as measured by R2 when we consider External debt and Inflation as separate variable. The model summary shows that it is able to explain 89.6% of the variation in Factor score 1 due to the above mentioned variables. All the variables are statistically significant at 5% level.

Table 4.1.1: Model Summary(c)

Model	R	R Square	Adjusted R Square
1	0.885	0.783	0.756

Further regression is carried out with respect to factor score 2 corresponding to variables real interest rate and Inflation. The model summary reflects that 78.3% is explained by factor score 2, all the variables are statistically significant at 5% level of significance.

Table 4.1.2: Model Summary (d)

Model	R	R Square	Adjusted R Square
1	0.840	0.706	0.669

Table 4.1.3: Model Summary (e)

Model	R	R Square	Adjusted R Square
1	0.953	0.908	0.897

Two more regressions were carried out. One of them was between inflation, factor score 1 and Factor score 2. In this case, the overall model is statistically significant. It explains 70.6% of the variation in the dependent variables by the independent variables. Further, all the coefficients are statistically significant at 5% level. In the final regression between External debt, factor score 1 and Factor score 2, the model explains 90.8% of the variation in the dependent variables by the independent variables. Further, all the coefficients are statistically significant at 5% level.

Factor 1 can be named as Balance of Payment variable and Factor score 2 can be named as Financial development variables.

4.3 Interpretation of Findings

From the above analysis Factor score one “Balance of Payment Variable”, factor 2, “Financial Development Variables”, external debt and inflation are significantly affecting FDI inflow.

There is a negative relationship between inflation and FDI. As Inflation goes down more FDI is attracted into the economy. Inflation is used as an indicator for volatility of an economy in relation to consumer prices as well as exchange rates. Foreign investors become confident of a market where there is some consistency therefore high inflation acts as a deterrent of FDI.

According to the analysis a reduction in external debt attracts more FDI. External debt is used to supplement the existing capital in the economy. Therefore when there is less of it FDI receives

more demand thus increasing FDI inflows in Kenya. Less External debt also may mean less liability which in essence means a higher capacity to bring a better return on the foreign investment.

Balance of payment variables which include GDP, Foreign Exchange Reserve and Current Account also play a significant role in determining FDI inflows. Basically these variables indicate the health in economy.A high GDP attracts FDI inflows. As the size of the economy grows it boosts investors' confidence in countries' economic policies, resulting in increased inflows. On the other hand Foreign exchange reserves have a negative relationship with FDI. A decrease in foreign reserve attracts more FDI into Kenya

Current account is statistically insignificant according to the model at 5% significance level. Therefore it is irrelevant in attracting FDI inflow. However, there is a positive relationship between Current account balance and FDI inflow. Therefore an increase in the current account leads to an increase in FDI inflow.

Financial development variables which include Openness of the economy and Real Interest Rates also have a significant impact on FDI inflow. An increase in Openness of an economy also leads to an increase in FDI inflow. Openness of an economy signifies globalization and integration of markets. A higher level in integration represents Kenya's goodwill and reputation in the eyes of foreign investors thus attracting more FDI inflow. On the other hand a decrease in the real interest rates leads to an increase in FDI inflow.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

In this chapter, the summary, conclusion, recommendation, limitations and areas of further study will be established

5.2 Summary

The objective of this study was to find the relationship between capital flows and FDI in Kenya. FDI inflows was established as the dependent variable while Real Interest Rate, Inflation, External Debt, Foreign Reserve, GDP, Openness of the Economy and Current account balance were used as independent variables.

A multiple regression analysis was conducted on the data and a linear relationship was established where by 63.5% of the variance in FDI inflow could be established by the independent variables while 36.5% remained unexplained. There was high multicolinearity, therefore data reduction through factor analysis was done so as to make the model statistically significant.

Four major components were established. Factor 1, “Balance of payment variables”, factor 2 “Financial determinant variable”, inflation and external debt. Decrease in inflation and external debt attracts more FDI inflow. Increase of Openness of the economy also leads to attraction of

more FDI.Decrease in foreign exchange reserve and Real interest rates leads to an increase in FDI.

5.3 Conclusion

This research investigated the factors enhancing the attractiveness of FDI recipient country over the period 1992-2011. The management of GDP is reported to be positive and significant and is line with Aseidu (2002). Openness had a positive impact on FDI as well and is in line with the fact that an efficient environment that comes with more openness to trade is likely to attract foreign firms. The size of the domestic market though to a large extent as witnessed by the size of their respective coefficients, played a positive role while Real Interest rates and Inflation had a negative role in attracting FDI in the markets and the results are consistent with empirical works in the field.

5.3 Recommendations

A very important and significant implication of the study is that government policies should be directed towards improving the fundamentals of the economy, such as Gross Domestic Product and Total External Debts, if the intention is to attract capital inflows. Growth in the size of an economy can lead to an increase in capital flows because of growing investor confidence.

Monetary policy should be managed accordingly so as to control inflation rates. Price stability of goods and services should be keenly monitored so as to avoid high prices which are normally associated with inflation. Contractionary measures, whereby the money supply is expanded more slowly than usual, should be aggressively observed so as to attract more FDI into the country.

Contractionary measures should also be adopted in the fiscal policy. This means the government should relatively increase taxes and cut on their spending so that there is a decrease in deficits. Decreased deficits will lead to less borrowing which will lead to lower real interest rates. Reduced real interest rate attracts more FDI into the country.

5.4 Limitations of the Study

Although the research has reached its aims there were some limitations. Politics of the country which are a major influence of FDI inflow were not well represented in the model. Therefore there effects were not well expressed in the model. There were also time constraints which had to be addressed.

5.5 Areas of Further Study

Other areas of study that could be further explored are, the spillover effects of FDI in Kenya and the relationship between real estate and FDI inflow in Kenya

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