THE EFFECTS OF INTEREST RATES ON FOREIGN DIRECT INVESTMENTS IN KENYA

BY:

BENSON KIPLAGAT

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION (MBA), SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

2016
DECLARATION

This research project is my original work and has not been submitted for a degree award at the University of Nairobi or any other university.

Signature ___________________ Date ____________________________

Mr. BENSON KIPLAGAT

D61/63394/2011

SUPERVISOR’S DECLARATION

This research project has been forwarded for examination with my approval as the University Supervisor.

Signature____________________ Date______________________________

Mr. Nicholas Simiyu

Lecturer,

Department of Finance and Accounting

School of Business, University of Nairobi
ACKNOWLEDGMENTS

Firstly, my sincere gratitude to the Almighty by whose grace I was able to undertake and complete this study.

Secondly, I feel a deep sense of gratitude to my supervisor, Mr. Nicholas Simiyu, for his guidance and contributions that made the development and production of this work a reality.

Lastly, appreciation also goes to all my friends and colleagues for their support and encouragement throughout the demanding journey.
DEDICATION

I dedicate this project to all those who strive in service to humanity. Secondly to my family for their love, support, patience, encouragement and understanding. They gave me the will and determination to go through in my studies.
TABLE OF CONTENTS

DECLARATION ................................................................................................................................. ii

ACKNOWLEDGMENTS .................................................................................................................... iii

DEDICATION ..................................................................................................................................... iv

TABLE OF CONTENTS ....................................................................................................................... v

LIST OF FIGURES ............................................................................................................................. viii

LIST OF TABLES ............................................................................................................................... ix

LIST OF ABBREVIATIONS ............................................................................................................... x

ABSTRACT ........................................................................................................................................ xi

CHAPTER ONE .................................................................................................................................... 1

INTRODUCTION ................................................................................................................................. 1

1.1 Background of the Study ........................................................................................................... 1

1.1.1 Interest Rates .......................................................................................................................... 4

1.1.2 Foreign Direct Investments .................................................................................................... 4

1.1.3 Relationship between Interest Rates and Foreign Direct Investments ......................... 5

1.1.4 Interest Rates and Foreign Direct Investments in Kenya ................................................. 6

1.2 Research Problem ..................................................................................................................... 7

1.3 Research Objective .................................................................................................................... 9

1.4 Value of the Study ..................................................................................................................... 9
CHAPTER TWO .............................................................................................................. 11

LITERATURE REVIEW ............................................................................................... 11

2.1 Introduction .......................................................................................................... 11

2.2 Theoretical Review .............................................................................................. 11

2.2.1 Production Life Cycle Theory ........................................................................ 11

2.2.2 The Internationalization Theory ...................................................................... 12

2.2.3. The Neoclassical Theory of Investments ...................................................... 13

2.3 Determinants of Foreign Direct Investments ....................................................... 16

2.4 Empirical literature review .................................................................................. 18

2.5 Summary of Literature Review ........................................................................... 19

2.6 Conceptual Framework ....................................................................................... 20

CHAPTER THREE ........................................................................................................ 22

RESEARCH METHODOLOGY .................................................................................... 22

3.1 Introduction .......................................................................................................... 22

3.2 Research design .................................................................................................... 22

3.3 Data Collection ..................................................................................................... 22

3.4 Data analysis ......................................................................................................... 23

3.4.1 Analytical Model ............................................................................................ 24

3.4.2 Justification of Variables ................................................................................ 25

3.4.3 Test of Significance ....................................................................................... 26
CHAPTER FOUR .............................................................................................................. 28

DATA ANALYSIS, RESULTS AND DISCUSSION ...................................................... 28

4.1 Introduction ........................................................................................................... 28

4.2 Data Presentation ................................................................................................. 28

4.3 Descriptive Statistics ......................................................................................... 29

4.4 Regression analysis ............................................................................................ 31

4.5 Summary and Discussion of Findings ............................................................... 34

CHAPTER FIVE ............................................................................................................. 36

SUMMARY, CONCLUSIONS AND RECOMMENDATION ................................. 36

5.1 Introduction ........................................................................................................... 36

5.2 Summary of Study ............................................................................................... 36

5.3 Conclusions ......................................................................................................... 36

5.4 Policy recommendations ..................................................................................... 37

5.6 Limitations of the study ...................................................................................... 38

5.7 Suggestions for Further Research ...................................................................... 38

REFERENCES ............................................................................................................ 40

APPENDICES: ............................................................................................................. 47

Appendix I: Kenya Data: 1971 – 2014 .................................................................... 47
LIST OF FIGURES

Figure 1.1: FDI inflows in Kenya 2006- 2015………………………………………2

Figure 4.1: FDI Distribution in Kenya 1971- 2014…………………………………25

Figure 4.2: Interest rates distribution…………………………………………………26
## LIST OF TABLES

Table 4.1: Descriptive statistics ................................................................. 24

Table 4.2: Pearson moment correlation coefficients ................................. 26

Table 4.3: Analysis of variance, ANOVA ...................................................... 27

Table 4.4: Pearson moment correlation coefficients .................................. 28

Table 4.5: Model summary – goodness of fit ............................................ 29
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>APR</td>
<td>Annual Percentage Rate</td>
</tr>
<tr>
<td>ANOVA</td>
<td>Analysis of variance</td>
</tr>
<tr>
<td>CBR</td>
<td>Central Bank Rate</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>KBRR</td>
<td>Kenya Bankers Reference Rate</td>
</tr>
<tr>
<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
</tr>
<tr>
<td>LDCs</td>
<td>Less Developed Countries</td>
</tr>
<tr>
<td>MNCs</td>
<td>Multinational Companies</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>OLSA</td>
<td>Ordinary Least Squares Analysis</td>
</tr>
<tr>
<td>PPPs</td>
<td>Public Private Partnerships</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for Social Scientists</td>
</tr>
<tr>
<td>SGR</td>
<td>Standard Gauge Railway</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nation Conference on Trade and Development</td>
</tr>
</tbody>
</table>
ABSTRACT

Foreign direct investment has always been viewed as a source of capital for domestic investment. It not only helps to create employment but also enhance technology transfer technology and thus makes a major contribution to economic development. Understanding the role played by foreign direct investment to economic development, the government of Kenya recognizes the need to attract it. Kenya needs foreign direct investment for the purpose of supporting her development projects. However, in a globally competitive market, attracting capital is a major challenge that every government has to overcome. The main aim of this study was to determine the effect of interest rates on direct foreign investments in Kenya. The study adopted a descriptive research design which assisted in the establishment of the relationship between interest rates and foreign direct investments in Kenya. The sample frame was based on 44 data points i.e. time series annual data of the dependent and independent variables from 1971 to 2014. The dependent variable was FDI while the independent variables were; interest rates and other variables namely, inflation, exchange rates and GDP since they are the main macroeconomic variables in the economy. Data was gathered only from secondary sources and analysis done using SPSS 17.0. The findings in other areas concurred with other studies while in some areas it contradicts. Descriptive and inferential data analysis was used to analyze the data. The overall findings and conclusion of the study was that interest rates have a positive correlation with FDI but not significant at all in determining the level of FDI inflows in Kenya. Inflation, exchange rates and GDP have negative correlation with FDI therefore not also significant in attracting FDI. 95.58% inflows can be explained by other factors. Another study should be done in Kenya using other variables like labor cost, risk factors, government policy, openness to trade and political stability to determine their role in attracting foreign direct investments. Foreign direct investment is a key pillar in economic development in a country. The government should do its best in ensuring that investors troops in large numbers for investment. By developing friendly investment policies and offering incentives to already existing investors, the whole idea of development will be achieved. Investments through FDIs create jobs for the locals and boost GDP given that the cost and value of goods and services produced and sold within the country will be higher. The government also should embrace private- public sector partnerships to realize some its long term goals. By providing a policy frame work that protects investors the government would benefit more from FDI. High interest rate environment is good also for investors. The government should strike a balance by introducing other incentives for investors other than begging interest rates high. FDI should be channeled to key sectors in the economy like the manufacturing sector, mining, tourism agriculture and education since FDI is harmful to the retail sector especially when foreign companies imports their raw materials. The success of the study wasn’t without challenges. Obtaining data from KNBS data archives especially data for data stored over 44 years ago just after independence. Further research can be done on the role of inflation targeting on foreign direct investments. The study also recommends a research on whether pecking interest to high or too low may be a factor in determining the level of foreign direct inflows in a country.
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Foreign Direct Investment (FDI) refers to a type of investment where a resident of one country directly invests in the economy of another country. The direct investor acquires lasting interest in the enterprise in which he or she invests. The investor establishes a long-term relationship with the investment enterprise thus enabling the investor to influence management through voting rights. Conventionally, the direct investor acquires 10 percent of the ordinary shares of the direct investment enterprise which give him voting rights.

Kenya is a leading economy in the East Africa region. Consequently it attracted foreign investment in the 1960s and 1970s. However, substandard public services, rampant corruption, government malfeasance, politically driven economic policies and poor infrastructure discouraged direct foreign investment in Kenya since the 1980s. For the last 28 years, compared to other East African countries, Kenya has been performing dismally when it comes to attracting direct foreign investment. It currently performs poorer than Uganda and Tanzania despite the fact that the two countries are smaller economically compared to Kenya (KPMG, 2012).

This study explores FDI inflows in Kenya from 1971 to 2014.

According to the World Investment Report and United Nations Conference on Trade and Development’s (UNCTAD) 2008 reports, Kenya is considered as the least attractive country in East Africa when it comes to attracting foreign direct investment.

US$566 million respectively, according to the World Bank’s World Development Indicators.

Figure 1.1: FDI inflows In Kenya

![FDI Inflow in Kenya, 2006-2015](image)

*Source: world bank website*

FDI is important in the sense that it contributes to capacity building through transfer of technology that is, external firms train local personnel on how to handle specific tasks regarding their operations. The foreign investments have an industrial effect of improving the general production levels and promoting competitiveness of host country products in the international market and they supposedly assist in transfer of cost effective technology. FDI is believed to close the technological gap which is high in the LDCs through direct and indirect technical transfer (World Development Report, 2011).

Foreign direct investment provides African economies with the needed capital to finance infrastructural developments create job opportunities for citizens and enhance transfer of technological innovations and managerial skills. Consequently, African governments have realized the critical role played by direct foreign investment in contributing to economic development. However, the global market for direct investment has become
increasingly competitive and therefore Kenya is facing numerous challenges in obtaining the much needed finance to accelerate its development projects.

Kenya business environment has been stable since the launch of vision 2030 in the year 2008. Various flagship projects that includes; the Konza city metropolis, LAPSET project, SGR, devolution, geothermal etc has placed Kenya in a good position to attract investors. According to African Development Outlook launched by African development bank (2015) Due to improved investor preference, investment to Kenya doubled last year. Consequently, Kenya has asserted its economy as the preferred regional business hub despite facing challenges in security which crippled the tourism sector. As a result on the improved foreign investment to Kenya, the country projects that 16, 0000 jobs will be created by 2019. The country also intends to create 2000,000 jobs from direct foreign investment by 2030. Another strategy that the government is undertaking to attract direct foreign investment is through privatization of state owned corporations which improve efficiency and transparency, thus drawing foreign capital into Kenya.

Kenya attained her independence in 1963 and was ruled by one party until 1992 when multiparty democracy was adopted. In the year 2010 Kenya passed a new constitution which paved way for the creation of 47 counties and a new order in terms of governance. Far reaching reforms has been reached thus enabling Kenya gain ground on investor confidence and a fresh environment for investment.

The researcher in this study investigated the effect of interest rates on the inflow of foreign direct investment in Kenya. The aim was to establish whether interest rates should be factored in policy making regarding foreign direct investment. Also the researcher was also interested in other factors relevant in determining the level of FDI inflows in Kenya.
1.1.1 Interest Rates

Interest rate is the amount of money charged by a lender to a borrower. It is often expressed as a percentage of the principal amount. Additionally, interest rates are expressed in terms of annual percentages. Singhania (2011) argues that interest rate is the amount of money an investor reaps from an investment. Direct foreign investors normally survey economies with low interest rates because they will enable them to obtain higher returns from the investments. Consequently, interest rates directly impact on foreign direct investment.

Traditionally, interest rates are higher during inflation, when there is higher demand for credit in the economy, when the economy is experiencing a tight money supply and as a result of increased mandatory reserves for banks. However, increased interest rates negatively affect business activities. This is because credit becomes expensive to acquire. During times of high interest rates, stock market investors reap higher returns for their investment especially from newly issued bonds and share trading.

According to the Central Bank of Kenya annual reports (2016), the current lending rates to commercial banks stand at 10.5 percent as at May 2016. Interest rates in Kenya were averaged at 14.26 for the period between 1991 and 2016. Interest rates were highest in July 1993 when they hit 84.67 percent. On the other hand, the lowest interest rates were experienced in September 2003 when it reached 0.83 percent.

1.1.2 Foreign Direct Investments

The World Bank (2013) defines foreign direct investment as the investment made to a foreign economy by an investor. The investor obtains management interests in the direct investment enterprise though a 10 % ordinary share holding and voting stock. Consequently, foreign direct investment is the total capital inflow into a domestic economy from foreign investors.
Hooda (2011) investigated the determinants of foreign direct investment in India between 1991 and 2008. The researcher employed multiple regression analysis methods. The findings of the research noted that the major determinants in foreign direct investments in developing country are corporate taxes, labor costs, interest rates, a stable political environment, exchange rates, infrastructure and inflation. On the other hand, Nabende (2002) noted that liberalization of foreign direct investment was a major factor affecting the long-term inflow of investment to Africa. Asiedu (2002) argued that an efficient investment framework was necessary to support and promote foreign direct investment in many African countries. On the other hand, investment restrictions crippled flow of capital to Africa.

FDI is a major contributor to economic development in Africa. This is because it not only increases the volume of investment but also promotes efficiency in the management of capital. Consequently, all countries are competitively making efforts to attract direct foreign investments. The most frequently used measure of FDI as per many studies use the ratio of FDI to GDP in order gauge on overall importance of FDI in the local economy.

1.1.3 Relationship between Interest Rates and Foreign Direct Investments

Agiomirgianakis (2003) defined FDI as capital inflow into a country as a result of investment from multinational business entities. The economic theory which explains how capital moves in the global economy insist that capital tends to flow to countries that have a higher return on investment as compared to countries with higher interest rates (Pholphirul, 2002). Consequently, investment is high in countries that offer better investment returns as well as security in the form of lower interest rates and a better
business environment. Capital therefore tends to move from countries with low rate return to countries with high rate of return.

Singhania (2011) argues that interest rates are normally adjusted to reflect changes in inflation. As a result, interest rates are critical determinants of foreign direct investment. Singhania (2011) defines interest rate as the cost of borrowing capital and also a measure of return on investment. Traditionally, investors will shop for low cost credit sources or lower interest rates and invest it in economies that are promising higher returns.

The aim of the current research was to investigate the relationship between foreign direct investment and interest rates in Kenya. Regression analysis will be used to analyze how economies compete in attracting investment from FDI with interest rate as the main variable. Consequently, the analysis will help in determining whether a negative or positive correlation exists between foreign direct investment and interest rates of an economy. According to (chingarandeAnne, 2011) established that FDI is mainly influenced by risk factors, labor costs and GDP in Zimbabwe.

1.1.4 Interest Rates and Foreign Direct Investments in Kenya

It is important to note that key decisions on interest rates are made by The Monetary Policy Committee (MPC) of The Central Bank of Kenya. Currently, the Central Bank Rate (CBR) is considered the official interest rate in Kenya after it replaced the 91-day Treasury Bill (TB) rate. The current data on Interest Rate and historical chart data was last updated in June 2016. The KBRR is normally calculated as a mean of the rate released by the Central Bank. This is the rate which financial institutions use when borrowing money from the Central Bank. The idea was that all loans would be priced at KBRR plus a risk margin ‘k’, where ‘k’ would reflect the creditworthiness of the
customer. This means that in the life of a loan, ‘k’ remains constant, unless the loan is renegotiated or the creditworthiness of the customer changes.

Effectively, once ‘k’ is established for a particular loan, the lending rate would only be affected by a change in KBRR and not at the discretion of the bank. KBRR would then be the tool by which the impact of changing market conditions and monetary policies would be transmitted to the credit market, through a revision by the Monetary Policy Committee every six months.

According to Vesarach (2014), who conducted a study on the role of interest rates in attracting FDI in the Asian economies; the results showed that the determinants of FDI are interest rates, inflation, GDP, exchange rates, labor cost, money growth and political rights. This study was interested in a few of these factors namely GDP, exchange rates, inflation and other risk factors.

1.2 Research Problem

Chantal, Dupasquier and Osakwe (2005) insist that African leaders are faced with major challenges in attracting foreign direct investment. While a number of strategies have been implemented in the past, they have not been very effective in attracting foreign direct investment. Most of these strategies have been ineffective because they have been ill conceived. Additional, the strategies do not address the specific constraints on foreign direct investment in East Africa. Consequently, they failed to address the challenges encountered in attracting foreign direct investment which are imposed by the process of globalization.

Low levels of economic development and lower standards of living have made foreign direct investment in Kenya to be moderate. Consequently, the inability of the Kenyan government to attract foreign direct investment has become a major drawback for the
country’s goal of achieving economic prosperity and sustainable development. Investment in Kenya ranges from labor abundances, financial market, tourism, mining and agriculture. However, as FDI remains low, these critical industries are affected and thus the national development. This research study intends to identify some of the major challenges that may be causing the slow growth in foreign direct investment and attempt to make critical recommendations to aid the Kenyan government in attracting foreign direct investment.

Chingarande, (2011) investigated the effect of interest rates on foreign direct investment in Zimbabwe. The study outline the determinants of FDI which includes interest rates and other factors which affect rate of return on investment such as inflation, exchange rates, labor cost, GDP and risk factors. The researcher noted that there was no significant relationship between interest rates and the inflow of foreign direct investments. Consequently, interest rates should not be considered when making key policies regarding foreign direct investment. The researcher noted that some of the major risk factors that impacted on foreign direct investment in Zimbabwe were political campaigns, campaigns to promote peace, transparency in institutions and efforts to end corruption in government institutions. These were identified as critical issues that when addressed can help improve foreign direct investment in Zimbabwe.

On the other hand here in Kenya several research studies have been done on FDI and its importance into the economy. According to Kinuthia (2010) in his study on the factors affecting FDI in Kenya the main focus was on policy framework and economic determinants. The study findings showed that policy framework and maintaining political stability are key factor in attracting FDIs in Kenya. Furthermore Ochieng and Anyango (2012) conducted a study on the effect of fluctuating exchange rates in
determining FDI in Kenya. The findings of the study showed that fluctuating exchange rates is not significant in attracting FDIs. Increase in exchange rate fluctuation leads to an increase in FDI inflows in Kenya.

From the above discussion, there is no study that has solely concentrated on the role of interest rates in attracting foreign direct investments in Kenya. The current study intended to fill the knowledge gap by answering the following research questions: What is the role of interest rates in attracting FDIs in Kenya?

1.3 Research Objective

To investigate the effects of interest rates on foreign direct investments in Kenya.

1.4 Significance of the Study

This research is important to several stakeholders:

To other researchers and scholars, the outcomes of this research will be a fundamental source of literature material for future studies on foreign direct investments and economic development in general. This study will also enable researchers find areas for further research through the suggestion for future researchers.

The study findings will also be valuable to investors by providing them with relevant information on business environment to put their investment and reap higher returns on their money.
The findings of this study will also be valuable to the Government of Kenya especially in development of policies and regulations to attract more investors for economic prosperity.
2.1 Introduction

This section of the study reviews literature by different scholars that focuses on the role interest rates play in attracting foreign direct investment in Kenya. First, it briefly reviews the theoretical models on which the study is built before reviewing the empirical studies relevant to the subject. The chapter then proceeds to present the chapter summary.

2.2 Theoretical Review

Theoretical review covers the theories that explain the role of interest rates in attracting FDI’s in a given Economy. FDI is believed to be important in solving developing economies problems. Mwalima (2003) argued that foreign direct investment is a major source of capital for investment FDI especially in less developed countries (LDCs) where the base is low. He further submits that technology transfer into local production process, be used by local enterprises. Similarly, Addision and Movrotas (2004) identify FDI as a crucial source external development finance in an effort of LDCs achieving financing of millennium development goals (MDGs).

2.2.1 Production Life Cycle Theory

Vernon (1966), defines production life cycle as a process that consists of four phases of production which include innovation, growth, maturity and decline. A business entity would first come up with an idea about a product or a service. The product or idea then
goes through a growth stage and finally attains maturity. It then begins to decline. The product decline is mainly caused by competition in the market place as well as inability of the business to innovate.

Companies that are directly involved in foreign direct investment bring production equipment to foreign countries in order to be near the target market and ensure a sustainable market share is attained and maintained.

The production life cycle described by Vernon is typically used in countries that are engaged in manufacturing and exporting products. Sometimes, the countries may lose the market share to competitors who imitate the products and end up being the main exporters of the product. The theory explains that diffusion of technological innovations takes place at a much slower rate. As a result, differences are likely to occur in terms of the production technologies used by different countries. However, it is important to emphasize that the production life cycle described by Vernon is only applicable to certain kinds of products especially those targeting high income earners and products that have alternative labor and capital sources. Critiques have argued that Vernon’s theory is silent on industrial innovation which is important in taking transitional advantages on innovations that require a significant amount of rent to develop.

Vernon’s analysis of foreign direct investment solely focused on the product. A summary of the process shows that a product is first invented in the home country. The home country, where the foreign investor resides has advantages in terms of technology and innovation capabilities. The innovator produces the product for the local market first. At a later stage in the production cycle, the product is exported to foreign countries which lack the technology or the innovative capacity to develop similar products. Consequently, the product becomes standardized and eventually matures. At this stage of the product
development, labor becomes and critical production input. Consequently, the investor has to attract value input from local materials and people in the foreign country. As a result, foreign direct investment is viewed as a critical stage in the product development life cycle.

### 2.2.2 The Internationalization Theory

The internationalization theory was advanced by Buckley and Casson (1976), Rugman (1981), and Hennart (1982). The theory explains that a multinational company will always seek to control a foreign direct investment enterprise. The foreign direct investor controls the knowledge-based and intangible components of the business. The internationalization theory insists that the investor takes ownership of mainly efficient-based firm-specific advantages. Additionally, the theory helps enterprises to minimize exposure to business risk associated with investment into special assets through vertical FDI.

The theory argues that the ability of an enterprises tend to invest in a foreign economy is determined by a comparative cost benefit analysis between the return on investment in the local economy and the foreign economy. The theory also notes that the decision to invest in a foreign country does not solely depend on the returns on investment but by other factors such as demand for the product, cost of capital, economies of scale, political stability and barriers to entry. According to Carbaugh (2000), investors may choose to invest in countries where factors of input such as raw materials and labor are comparatively cheaper in order to reduce production costs. This explanation has been widely used to explain the increase in FDI to Asian countries such as India and China where factors of production such as labor is relatively cheap compared to other parts of the world. Some notable similarities exist between the product development life cycle
and the internationalization theory (Hymer, 1972). Multinational enterprises offer foreign direct investment in order to increase their global market share. Consequently, multinationals benefit by eliminating emerging domestic competition by using global experience and expertise. Additionally, these companies are able to source local resources in foreign countries and enhance their management practices.

2.2.3. The Neoclassical Theory of Investments

Cockcroft and Riddell (1991) insist that foreign direct investment movement are determined by the incentives that investors get which in turn influence the returns on investment that investors are likely to get. Other critical factors include the security of investment and the speed at which an investor is able to withdraw their investment from the foreign economy. Consequently, factors such as macroeconomic policies, investment code and tax regime are critical determinants of foreign direct investment. The neoclassical theory argues that foreign direct investment increases the capital per person and thus influences income growth in a country. Additionally, FDI has been linked to sustainable long-term growth by enhancing research and development as well as improving on human capital. FDI has also been known to promote technological transfer and diffusion of technology in the foreign countries. Foreign direct investment generally spurs development by improving product quality through standardization and investment in research and development. It also offers opportunities for collaboration and human capital development (Ikiara, 2003)

Bajona and Kehoe (2006) used neoclassical theories to explain how multinational production is conducted through capital movement. They employed the Hecksher-Ohlin framework in understand the movement of capital. The two researchers criticized neoclassical theories in that they were based on the assumption that goods markets and perfect factor existed in the global economy. Consequently, the theories failed to provide sufficient explanation for the patterns in movement of capital through foreign direct investment. The researchers concluded that in the absence of market issues, the
neoclassical theories assumed that foreign direct investment will not exist which is generally not the case.

The researchers also argued that investment risks which are present in foreign markets means that foreign investors must identify distinct advantages of investing in a foreign economy as opposed to investing in a local economy. There are three categories of economic growth theories. First, early post-Keynesian growth models such as Harrod-Domar Growth theory have emphasized the critical role played by savings and investment in spurring economic growth. Secondly, the neo-classical models of economic growth explain the importance of technology as a critical factor in influencing economic growth. Lastly, the endogenous growth theory which emphasizes the role played by research and development and human capital development in achieving sustainable long-term economic growth. The endogenous growth theory measure economic growth by analyzing the growth rate of the gross domestic product of a country.

According to Seidman (1987) the neoclassical theory of investments emphasized that the desired capital–output ratio increases if the cost of capital falls. The theory gives special emphasis to the role of the user cost of capital in determining the optimal capital-output ratio.

Initially, international firms were presumed to categorize investment projects based on their marginal efficiency of investment or internal rate of return. Using this approach, when a firm is faced with various projects under different rate of interest (r), the firm would choose projects with internal rate of return which is higher than the rate of interest (r). Consequently, when the firm has an infinite number of projects, this means that the company will invest until its rate of return is equal to the marginal efficiency of investment. Keynes noted that marginal efficiency is equivalent to the rate of discount which will make present value of a list of annuities given its expected returns from a specific amount of capital asset for a given time period when its life is just equivalent to the price of capital (Keynes, 1936, page 135).
Marginal efficiency of capital can also be referred to as the annual return on capital earned by the last unit of capital added. It can also be termed as net capital productivity, natural interest rate, and marginal productivity of capital or rate of return over cost of capital. The most important thing to note is that marginal efficiency of capital represents the rate of interest in the market at which the firm begins to pay in order to start a capital investment project. Consequently, if the market rate is 10%, the firm would not undertake a project that has a return of less that 9.10%. On the other hand, a return of over 10% would be very much acceptable.

In macroeconomics, marginal efficiency of capital affects interest rates in the long term. This can largely be attributed to the law of diminishing returns. High yield projects depreciate and firms have to move capital to low yield projects as interest rates begin to decline.

When market rates begin to decline, investors begin to reap returns from projects that were initially considered as uneconomical. This process is referred to as diminishing marginal productivity.

2.3 Determinants of Foreign Direct Investments

Determining the qualities and quantities of FDI factors in a given location can be a difficult task. However, it is evident that a minimum set of the factors must be present in the location for FDI to flow (Ngowi, 2001). Once would assume that an investor would select an economy where profitability would be high. However, in an extensive study on the factors influencing FDI, Ajayi (2007) argued that investors would consider a number of critical factors a part from profitability. These include: macroeconomic policies, returns on investment, agglomeration affects, natural resources, institution environment, country risk openness, availability of goods infrastructure, costs and the skills of workers, market size and growth,
Empirical studies have tested various variables that can potentially attract or repel foreign direct investment. Such variables include market-driven variables such as rate of return, labor cost; structural variables, such as infrastructure development and political stability; and macroeconomic policies formulated to achieve economic growth, taxation, price stability. This study will be interested in the following variables namely; inflation, exchange rates, GDP, labor cost and other factors as some of determinants of FDI.

Inflation is the increase in prices of goods and services. It is determined using the retail price index (RPI) or consumer price index (CPI) and often expressed as an annual percentage rate. As inflation of an economy rises, the prices of goods and services rise. Consequently, every dollar you have buys less and less goods and services. An increase in inflation causes a corresponding increase in interest rates. This is because less money is available and thus the cost of doing business goes up.

Low inflation rate is an indicator of economic stability. Any factor that causes uncertainty affects investor perception of future returns on their investment. Adinboade, (2006). Wint and Williams (1994) argued that countries that are perceived to be more stable attract higher FDI compared to those that are unstable.

Another important determinant of FDI is exchange rates. Linda s. goldenber (2005) define exchange rates are the domestic currency price of a foreign currency. Exchange rates affect FDI in terms of their volatility and levels. Exchange rate affect the amount of money that investors invest through FDI and also affects the way investors allocate investments for different countries (Linda s. goldenber, 2005)

Campa (1993), provides contrary arguments about the link between exchange rates and FDI. He argues that the decision of whether to invest in a foreign economy depends on the investor’s expectation of future profitability of the investment. Consequently, the higher the exchange rate and the more it is rising the higher the likelihood of generating profits from investments in foreign markets.
Gross Domestic Product (GDP) is defined as a measure of market value of all the goods and services that a country produces. It is used to monitor the economy and is usually measured either quarterly or annually. Nominal GDP estimates are used to measure economic performance and conduct a comparative analysis of economic performance between countries.

Research findings by Veugelers, (1991) and Grosse and Trevino, (1996), show that there is a strong positive impact on a country's economic growth as a result of attracting FDI. The researchers noted that increased FDI leads to an increase in economic activity in the host countries.

Labor cost can be defined as the cost of production. While there is a limited number of papers on the importance of labor cost, Gopinath and Chen (2003) found that inward FDI flows increase the wage gap between skilled and unskilled workers in developing countries. Sawkut et al. (2007) found that greater labor cost has a negative impact on FDI inflows.

Risk factors in this study include war, political instability and failure to observe democratic rights. Because most investors are risk averse and political instability increases the risk of investments, it is expected that political instability will negatively affect FDI inflows. A significant number of studies found that political instability negatively impacts FDI. Quazi (2007) found that political instability decreased FDI inflow into East Asia and suggested that promoting economic and political stability is helpful for economic planning, investments and FDI in particular.

2.4 Empirical literature review

Hooda (2009) investigated the effect of FDI on the Indian economy between 1991 and 2008 using multiple regression models. The regression model was specified as below:
The findings showed that the significant factors that determine FDI in developing countries are corporate taxes, labor costs, interest rates, stable political environment, exchange rates, infrastructural facilities and inflation. Additionally, Bende-Nabende (2002) found out that FDI liberalization is among the factors that affect FDI in Africa especially in the long term. Asiedu (2003) argued that a good investment framework contributes to higher FDI for African countries.

Basu and Srinivasan (2002), excessive regulation of the market through domestic investment policies and barriers to entry into certain sectors of the economy are affecting efforts to attract FDI in many African countries. For instance, Ghana has managed to attract foreign investment by increasing the sectors that are available for foreign investment.

Kinaro (2006) employed time series data analysis to determine how FDI in Kenya was affected by inflation, real exchange, human capital, taxation and economic openness. The study assumed that variables such as political rights, wage, natural resources, financial development and government consumption were deemed insignificant. The researcher concluded that FDI positively affects economic development through increased business activity.

Nyamwange (2009) conducted a research study to investigate foreign direct investment in Kenya. The main aim of the research was to determine factors that influence FDI decisions in the Kenyan context. He explored the correlation between FDI and economic development in Kenya. The study findings showed that FDI in Kenya is affected by level of human capital, stable macroeconomic policies, taxation, and market size. Additionally, there was no statistically significant link between human capital and GDP which means that there is shortage of skilled employees in Kenya.
2.5 Summary of Literature Review

Several theories have been advances to explain the motivation behind FDI. Foreign direct investment has several effects on an economy. It can provide necessary resources for management expertise, economic development such as technology and financing in infrastructure. It also contributes to employment and increases efficiency in markets.

Sethi, (2003) noted that other factors that motivate African governments to attract foreign direct investments include higher productivity, development of skilled labor force and technology transfer. Additionally multinational corporations can help improve competition in the local markets (2012).

Literature shows that there are two approaches to investment which are Hayekian and Keynesian perspectives. The Hayekian perspective views investment as a movement towards a point of equilibrium. Consequently, decisions on investment are only effective if they promote faster adjustment or movement to the equilibrium point. For example, a company may recognize the need to build a warehouse, however, the decision on how fast to build it and how much funds to spend are investment decisions too.

On the other hand, the Keynesian approach emphasizes less on the concept of adjustment of investments towards a point of equilibrium. It adopts a behavioral approach to investment where the main concern in investments is the optimal amount of investment for a specified period. However, it is critical to point out that the optimal investment refers to optimal behavior and not optimal adjustment. Research in factors affecting investment is often based on the neoclassical theory of optimal capital accumulation (1963, 1971).

2.6 Conceptual Framework

This study aims to establish the relationship between the two types of variables; namely dependent and independent variables. In this case, the dependent variable is FDI and the
independent variables are interest rates and other factors namely inflation GDP and exchange rates that effects FDI inflow in general. As shown in the diagram below.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In chapter of the research identified the procedures and methods that were used in the collection and analysis of data. It included; research design, data collection and data analysis.

3.2 Research design

According to Kothari (2003), research design provides the link that holds the research project together. Mugenda and Mugenda (2003) defined a descriptive research design as a scientific approach which entails observing and describing the behavior of an event or subject without in any way influencing it.

Descriptive survey design was used to structure the research and show how all of the major parts of the project and methods of the research work together to address research questions. A descriptive survey will be undertaken. It designs results in a description of data either in words, pictures, charts or tables or describes whether data analysis shows statistical relationship.

3.3 Data Collection

The method of data collection used was entirely from secondary sources in this study. Secondary data was preferred because it saves time and it rules out the option of
collecting biased data from primary sources, it also provides larger and higher-quality
databases that would appropriate for individual researchers to collect data on their own.
Data was extracted from existing literature. Statistical abstracts for period 1971 to
2014 was used to collect data from the Kenya National Bureau of Statistics and analyzed. Also annual economic reports, journals, articles, research papers, magazines, and books from central bank of Kenya were useful.

Since the variables in this study are GDP, inflation, labor cost, interest rates, exchange rates and FDI which form part of the of the economy will be the population.

3.4 Data analysis

This study made use of statistical measures such as frequency distribution, measures of central tendency like mean, median and mode. Measures of dispersion such as range and standard deviation were also used to describe quantitative variables.

Data was then summarized using frequency distribution. Mode was used to measure the central tendency. The research will employ the use of Statistical Package for the Social Sciences (SPSS 17.0) to estimate the result of the relationship between the variables which will be analyzed through regression analysis. In trying to understand the correlation between the dependent and the independent variables regression analysis using Ordinary Least Squares Analysis (OLSA) was most appropriate. The data was tested for serial correlation, multicollinearity and heteroscedasticity.
3.4.1 Analytical Model

A theoretical model of the form outlined below will be used to find out the relationship between FDI and interest rates. According to Fedderke (2002) the core determinants of FDI fall into two classes that are rate of return ($\alpha$) and risky factors ($\beta$).

$$\text{FDI} = F(\alpha, \beta)$$

Where $\alpha$ represents a collection of determinants of rate of return on FDI that includes interest rates (IR), and $\beta$ other factors such as, inflation (IFL), GDP growth rates (GDP) and exchange rates (ER). The output is a theoretical model of the form:

$$\text{FDI} = (\text{IR, IFL, GDP, ER,})$$

It is assumed that there is variability in the X-variable.

Empirical model

To determine the relationship between FDI and interest rates a CLRM Ordinary Least Squares (OLS) was used. The model was as shown:

$$\log \text{FDI} = \pi + \omega_1 \Delta \text{IR} + \omega_2 \Delta \text{GDP} + \omega_3 \Delta \text{IFL} + \omega_4 \Delta \text{ER} + \Theta$$

Where FDI is foreign direct investment; $\omega_1, \omega_2, \omega_3$ and $\omega_4$ are parameters that measure the slope of the regression equation.

Independent variables was measured a standard deviations of nominal values and defined as the mean adjusted relative change. Logarithm of FDI was done as a reciprocal of tens of millions of dollars for transformative purposes to normalize the data.
IR represents the interest rate;

GDP refersto gross domestic product;

IFL refers to inflation;

ER defines the exchange rate while Θ is the error term or the random residual term.

It is made up of two parts which are errors of sampling and purely disturbance random error.

Correlation analysis was used to carry out a diagnostic test for multicollinearity and autocorrelation.

3.4.2 Justification of Variables

**Foreign Direct Investment (FDI)** – The study used FDI stocks since they are less volatile compared to FDI flows which are affected by mergers and takeovers. Additionally, FDI stocks consists stock data accumulated over time which can be effective in analyzing long term contribution of FDI to the economy.

**Gross domestic product (GDP)**- Various studies have confirmed that there exists a positive correlation between economic growth and FDI (Veugelers,1991). Additionally there is a positive correlation between growth rate of the economy and foreign capital stocks. Consequently, FDI tend to flow to countries with improving GDP which results in increase business activity. Economic growth rate was determined as a percentage to nominal real GDP.
**Interest rates (IR)** - It refers to the rate at which an investor borrows money. It determines the cost of capital. Gross and Trevino (1996) points out that high interest rate positively impacts on FDI. The influence can either be inward or in reverse. The direction of FDI flow is determined by the host countries capital market structure and reasons for attracting FDI fund. The study used prime lending rates since investors can be borrowers or lenders. The research adopted mean adjusted deviations.

**Exchange rates (ER)** – Froot and Stein (1991) notes that exchange rates affect FDI via an unregulated capital market channel. Consequently, depreciation of local currency makes foreign investors wealthier and therefore encourages FDI. On the other hand, exchange rates that are overvalued results in BOP crises, unsustainably large current account deficits, corruption, rent-seeking, shortage in foreign exchange currency. These can affect the flow of FDI. Exchange rate volatility on the other hand affects foreign investments and imports to a country. The study adopted the mean adjusted deviations method.

**Inflation (INFL)** – Lower inflation rates indicates a stable economy. Consequently, any form of uncertainty distorts investor’s predictions of profitability and therefore affects the markets. Wint and Williams (1994) argued that stable markets have a tendency to attract FDI. Consequently, low inflation rate is required to ensure flow of FDI. The researcher expects a negative correlation in the regression analysis.
3.4.3 Test of Significance

The test of significance which was used was the $R^2$ test. The coefficient of determination, denoted as $R^2$ was used to indicate how well data fit into the statistical model. F-statistics (also known as fixation indices) was used to test the expected level of heteroscedasticity in the target population. Analysis of variance (ANOVA) was used in the analysis of experimental data to test the variables for statistical significance.
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents data analysis, interpretations and results of the study as set out in the research methodology. The analysis is both qualitative and qualitative. The chapter is structured according to findings obtained from secondary data findings and discussion together with implications. The results are presented on the effect of interest rates on foreign direct investments in Kenya. The data was gathered exclusively on secondary data sources alone as research method. Calculation of frequencies, averages, statistical tests like correlation and ANOVA tests, were utilized to analyze the data guided by research questions in reference to study objective.

4.2 Data Presentation

The Data that was collected was for a period of 44 years for the period 1971 to 2014. Raw data is presented first followed by regression analysis. To achieve the aim of the research, annual time series of data variables was used. Data was entirely obtained from the Kenya National Bureau of Statistics (KNBS), the World Banks data bank and own calculations.
4.3 Descriptive Statistics

Table 4.1 below the mean FDI received in Kenya for the period 1971 to 2014 was 95.5860 million dollars. The mean Interest rates, inflation, exchange rates and real annual GDP for the same period were 16.805%, 12.51, 45%, 42.7591% and 15216 respectively.

Table 4.1: Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI ($ Millions)</td>
<td>44</td>
<td>.39</td>
<td>944.00</td>
<td>95.5860</td>
<td>177.82364</td>
</tr>
<tr>
<td>Interest Rate %</td>
<td>44</td>
<td>9.0</td>
<td>36.2</td>
<td>16.805</td>
<td>6.9456</td>
</tr>
<tr>
<td>Inflation Rate %</td>
<td>44</td>
<td>1.55</td>
<td>46.00</td>
<td>12.5145</td>
<td>8.20797</td>
</tr>
<tr>
<td>Exchange Rate %</td>
<td>44</td>
<td>7.02</td>
<td>88.80</td>
<td>42.7591</td>
<td>31.20957</td>
</tr>
<tr>
<td>Real Annual GDP ($ millions)</td>
<td>44</td>
<td>1778.00</td>
<td>61395.00</td>
<td>1.5216E4</td>
<td>15169.43702</td>
</tr>
<tr>
<td>Valid N (list wise)</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4.1: FDI Distribution in Kenya

Figure 4.1 shows the distribution of FDI in Kenya from 1971 to 2014. Kenya received the highest amount of foreign direct investment inflows in 2014 of 944 million dollars than any other year and the lowest being in 1988 where Kenya received 0.394 million dollars.
Figure 4.2: Interest rates distribution

![LENDING RATES IN %](image)

Source: Research Data, 2016

From figure 4.2 above shows interest rates distribution in Kenya for the period 1971 to 2014. Interest rates were record low in 1971 at 9% and highest in 1996 at 33.8%.

4.4 Regression analysis

Table 4.2: Pearson moment correlation coefficients

<table>
<thead>
<tr>
<th></th>
<th>FDI</th>
<th>Interest Rate</th>
<th>Inflation Rate</th>
<th>Exchange Rate</th>
<th>GDP/Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>1.000</td>
<td>.097</td>
<td>-.076</td>
<td>-.006</td>
<td>-.117</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>.097</td>
<td>1.000</td>
<td>.410</td>
<td>.597</td>
<td>-.335</td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>-.076</td>
<td>.410</td>
<td>1.000</td>
<td>.603</td>
<td>-.394</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>-.006</td>
<td>.597</td>
<td>.603</td>
<td>1.000</td>
<td>-.342</td>
</tr>
<tr>
<td>GDP/Growth Rate</td>
<td>-.117</td>
<td>-.335</td>
<td>-.394</td>
<td>-.342</td>
<td>1.000</td>
</tr>
</tbody>
</table>
Correlation coefficient confirms the degree of linearity between variables. Table 4.2 shows the correlation coefficients between variables. FDI had a positive correlation of 9.7% with interest rates suggesting they are significant. FDI had a negative correlation of (-7.6 %) with inflation. Then FDI had also the lowest negative correlation of (-0.6%) with exchange rate. Finally FDI had the highest negative correlation of (-11.7%) with GDP. The negative correlation shows that there is insignificant correlation between the variables.

**Table 4.3: Analysis of variance, ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.687</td>
<td>4</td>
<td>.172</td>
<td>.451</td>
<td>.771a</td>
</tr>
<tr>
<td>Residual</td>
<td>14.849</td>
<td>39</td>
<td>.381</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.536</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Growth Rate, Interest Rate, Inflation Rate, Exchange Rate
b. Dependent Variable: FDI

Table 4.3 shows that FDI inflows can be explained to the extent of 0.687 out of 15.536 or 4.42% while the other variables not captured by this model can explain 95.57% (14.849 out of 15.536) of the FDI inflows.
Table 4.4: Regression coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3.798</td>
<td>.259</td>
<td>14.659</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Interest Rate</td>
<td>.009</td>
<td>.013</td>
<td>.139</td>
<td>.702</td>
</tr>
<tr>
<td></td>
<td>Inflation Rate</td>
<td>-.012</td>
<td>.015</td>
<td>-.170</td>
<td>-.837</td>
</tr>
<tr>
<td></td>
<td>Exchange Rate</td>
<td>-.002</td>
<td>.010</td>
<td>-.038</td>
<td>-.169</td>
</tr>
<tr>
<td></td>
<td>Growth Rate</td>
<td>-.022</td>
<td>.026</td>
<td>-.150</td>
<td>-.861</td>
</tr>
<tr>
<td></td>
<td>a. Dependent Variable: FDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4 shows the regression output. The coefficients to be used in this study are the unstandardized coefficients. The results indicate that a unit change in interest rate cause an increase of 0.009 (0.9%) changes in FDI Inflow. Inflation on the other hand showed that a unit increases of inflation causes a decline of -0.012 (1.2%) on FDI. A unit change in exchange rate cause a decline of -0.002 (0.2%) on FDI. Finally unit change in GDP cause a decline in FDI by -0.022 (2.2%).

In terms of significance of each of the predictors, a t- statistic was used to generate a p-value or coefficient of significance. None of the p-values is less than 0.05. This means that interest rates (p-value 0.487>0.05), inflation rate (0.408>0.05), exchange rate (0.867>0.05) and growth rate (0.395>0.05) are not significant in explaining foreign direct investment inflows in Kenya. This is the key finding of the study.
Table 4.5: Model Summary – Goodness of Fit

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.210a</td>
<td>.044</td>
<td>-.054</td>
<td>.61705</td>
<td>.044</td>
<td>.451</td>
</tr>
</tbody>
</table>

The test for the study used a regression model of the form, \[
\log \text{FDI} = \pi + \omega_1 \Delta IR + \omega_2 \Delta GDP + \omega_3 \Delta IFL + \omega_4 \Delta ER + \Theta.
\]

Table 4.5 shows the output of the model fitness. The R coefficient of 0.210 showed that the predictors of the model which is interest rates, inflation, exchange rates and real domestic product have a correlation of 21% with the dependent variable that’s is foreign direct investment. The coefficient of determination (R square) of 0.044 showed that the model can explain 4.4% of the variations of the dependent variable that is foreign direct investment. That means that 95.6% of the variations can be explained by other factors affecting foreign direct investment inflows in Kenya. This shows that the independent variables (interest rates, inflation, exchange rates and gross domestic product) are not significant in determining foreign direct inflows in Kenya.

4.5 Summary and Discussion of Findings

From descriptive statistics in this study the following was the findings:

The lowest and highest amount of foreign direct investment received for the period 1971 to 2014 was 0.394 million dollars and 944 million dollars respectively. Mean FDI for the
same period was 95.5860 million dollars. Interest rates on the other hand had the lowest percentage at 9% in 1971 and highest in 1996 at 33.8%. The mean interest rates for the period 1971 to 2014 were 16.805%. Inflation rates recorded the lowest in 1995 at 1.55% and highest of 46% in 1993. For the period 1971 to 2014 the average figure for inflation was 12.5145%. Exchange rates recorded the lowest in 1973 at 7.02% and highest in 2011 at 88.8% against the dollar. The all-time average from 1971 to 2014 was 42.7591%. Finally GDP growth rate was low at 0.232 in 2008 and highest in 1971 at 22.2%. The average mean for GDP growth rate was 4.329% from 1971 to 2014.

In terms of significance of each of the predictors, a t-statistic was used to generate a p-value or coefficient of significance. None of the p-values is less than 0.05. This means that interest rates (p-value 0.487>0.05), inflation rate (0.408>0.05), exchange rate (0.867>0.05) and growth rate (0.395>0.05) are not significant in explaining foreign direct investment inflows in Kenya.

FDI had a positive correlation of 9.7% with interest rates suggesting they are correlated. FDI had a negative correlation of (-7.6%) with inflation. FDI had also the lowest negative correlation of (-0.6%) with exchange rate. Finally FDI had the highest negative correlation of (-11.7%) with GDP. The negative correlation shows that there is insignificant correlation between two variables.

Analysis of variance indicate that FDI inflows can be explained to the extent of 0.687 out of 15.536 or 4.42% while the other variables not captured by this model can explain 95.57% (14.849 out of 15.536) of the FDI inflows.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

This chapter presents the summary of the findings from chapter four, and it also gives the
discussions, conclusions and recommendations of study based on the objective of the study.

5.2 Summary of Study

The objective of this study was to establish the effect of interest rates on foreign direct
investments in Kenya. The study employed descriptive research design which assisted to
establish the effect of interest rates on foreign direct investments in Kenya. Data for the
study was entirely collected from secondary sources covering a period of 44 years that’s
from 1971 to 2014. Data was analyzed using SPSS. 17. Software. The findings of the
study in some notable areas agreed with other past studies by other scholars but
contradict with other scholars in some areas.

5.3 Conclusions

Based on the findings of this study on a general point of view occlusions can be made. It
can be concluded that interest rate fluctuations, exchange rate fluctuations, inflation rate
and real domestic product/growth rate had shown no evidence in determining foreign
direct investment inflows in Kenya.

Interest rates showed a positive correlation with foreign direct investment (9.7%).
Suggesting that 9.7% of FDI inflows are explained by interest rates fluctuations. However
interest rates had a P-value of (0.487) which is greater than 0.05 which means that interest rates are not significant in explaining FDI entirely. Other variables used in this study i.e. inflation, exchange rates and GDP had a negative correlation with FDI (7.6%, 0.6% and 11.7% respectively). In terms of significance, inflation, exchange rates and GDP had a p-value of 0.408, 0.867 and 0.395 respectively. None of the P-values was greater than 0.05 meaning that the variables are insignificant in explaining FDI in Kenya.

Analysis of variance indicate that FDI inflows can be explained to the extent of 4.42% by variables used in this study while the other variables not captured by this model can explain the FDI inflows in Kenya.

5.4 Policy recommendations

FDI is an important source of investment in an economy. Performance of a host country in terms of GDP is important for investors in an economy however the country must do more to improve its GDP. To boost production of goods and services in a country the government need to revive closed manufacturing firms and do more in terms of research and extension on ways of increasing production by the availing information to local companies thus reducing the cost of research to local firms. High interest rate environment is good also for investors. The government should strike a balance by introducing other incentives for investors other than begging interest rates high.

Inflation negatively affects FDI inflows because investors are interested in the rate of return for their investment inform of profits. The government of Kenya should control and regulate inflation around levels that stimulate investments.
Other factors such as stabilizing the political environment, ensuring peace and security to citizens and businesses should be a priority for any government. FDI should be channeled to key sectors in the economy like the manufacturing sector, mining, tourism, agriculture and education since FDI is harmful to the retail sector especially when foreign companies imports their raw materials.

5.6 Limitations of the study

The success of the study wasn’t without challenges. Obtaining data from KNBS data archives especially data for data stored over 44 years ago just after independence. Extracting data from statistical abstracts was a major challenge. Reporting methods changed over time from statistical abstracts to economic surveys.

The study was also constrained by the unit of currency. Exchange rates were in sterling pounds till 1999. Currencies were to be converted into one currency that’s US dollars for a period from 1971 to 2014.

5.7 Suggestions for Further Research

This study is not exhaustive in examining the role of interest rates in determining the level foreign direct investment in Kenya. Further studies are needed to really examine what are the other factors that determine foreign direct investment inflows in a country. What do investors consider more before investing in a particular environment apart from macro-economic variables?

Other researchers who are interested may do research on the effect of risk factors such as political instability, war and government policies in attracting foreign direct investment.
Further research can be done on the role of inflation targeting on foreign direct investments.

The study also recommends a research on whether pecking interest to high or too low may be a factor in determining the level of foreign direct inflows in a country.
REFERENCES


Chingarande, A., Kambakuku, T. Et al (2011). The Impact of Interest Rates on Foreign Direct Investment: A Case Study of the Zimbabwean Economy (February 2009-


International Monetary Fund (1985). Foreign Private Investment in Developing Countries., International Monetary Fund, Washington D.C


Masron, (2012). The ASEAN Investment Area, other FDI initiatives, and intra-ASEAN foreign direct investment


Tonny, Addision & George, Movrotas (2004). Foreign direct investment, innovative sources of development finance and domestic resource mobilization.


http://www.worldbankgroup.com

http://businessdictionary.com

http://www.wikipedia.com

http://centralbanb.go.ke
APPENDICES:


<table>
<thead>
<tr>
<th>YEAR</th>
<th>LENDING RATES</th>
<th>% Δ IN LENDING RATES</th>
<th>REAL GDP ($ MILLIONS)</th>
<th>GROWTH RATE (%)</th>
<th>FDI INLOWS ($ MILLIONS)</th>
<th>LOG OF (FDI/10,000)</th>
<th>% Δ INFLATION (%)</th>
<th>EXCHANGE RATE (%)</th>
<th>% Δ IN EXC. RATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>9</td>
<td>0</td>
<td>1778</td>
<td>22.2</td>
<td>7.4</td>
<td>2.87</td>
<td>3.78</td>
<td>7.14</td>
<td>0.1</td>
</tr>
<tr>
<td>1972</td>
<td>9</td>
<td>0</td>
<td>2107</td>
<td>17.1</td>
<td>6.3</td>
<td>2.80</td>
<td>5.83</td>
<td>7.14</td>
<td>0</td>
</tr>
<tr>
<td>1973</td>
<td>9</td>
<td>0</td>
<td>2502</td>
<td>5.9</td>
<td>17.3</td>
<td>3.24</td>
<td>9.28</td>
<td>7.02</td>
<td>1.68</td>
</tr>
<tr>
<td>1974</td>
<td>9.5</td>
<td>5.6</td>
<td>2473</td>
<td>4.07</td>
<td>23.4</td>
<td>3.37</td>
<td>17.8</td>
<td>7.13</td>
<td>1.57</td>
</tr>
<tr>
<td>1975</td>
<td>10</td>
<td>5.3</td>
<td>3259</td>
<td>0.88</td>
<td>17.2</td>
<td>3.24</td>
<td>19.1</td>
<td>7.34</td>
<td>2.94</td>
</tr>
<tr>
<td>1976</td>
<td>10</td>
<td>0</td>
<td>3475</td>
<td>2.15</td>
<td>46.4</td>
<td>3.67</td>
<td>11.4</td>
<td>8.37</td>
<td>14.03</td>
</tr>
<tr>
<td>1977</td>
<td>10</td>
<td>0</td>
<td>4494</td>
<td>9.45</td>
<td>56.5</td>
<td>3.75</td>
<td>14.8</td>
<td>8.28</td>
<td>1.07</td>
</tr>
<tr>
<td>1978</td>
<td>10</td>
<td>0</td>
<td>5304</td>
<td>6.91</td>
<td>34.4</td>
<td>3.54</td>
<td>16.9</td>
<td>7.73</td>
<td>6.64</td>
</tr>
<tr>
<td>1979</td>
<td>10</td>
<td>0</td>
<td>6234</td>
<td>7.62</td>
<td>84</td>
<td>3.92</td>
<td>7.98</td>
<td>7.48</td>
<td>3.23</td>
</tr>
<tr>
<td>1980</td>
<td>10.6</td>
<td>6</td>
<td>7265</td>
<td>5.59</td>
<td>79</td>
<td>3.90</td>
<td>13.9</td>
<td>7.42</td>
<td>0.8</td>
</tr>
<tr>
<td>1981</td>
<td>12.4</td>
<td>17</td>
<td>6854</td>
<td>3.77</td>
<td>14.1</td>
<td>3.15</td>
<td>13.9</td>
<td>9.05</td>
<td>21.96</td>
</tr>
<tr>
<td>1982</td>
<td>14.5</td>
<td>16.9</td>
<td>6432</td>
<td>1.51</td>
<td>13</td>
<td>3.11</td>
<td>20.7</td>
<td>10.9</td>
<td>20.44</td>
</tr>
<tr>
<td>1983</td>
<td>15.8</td>
<td>9.6</td>
<td>5979</td>
<td>1.31</td>
<td>23.7</td>
<td>3.37</td>
<td>11.4</td>
<td>13.3</td>
<td>22.01</td>
</tr>
<tr>
<td>1984</td>
<td>14.4</td>
<td>1.4</td>
<td>6191</td>
<td>1.76</td>
<td>10.8</td>
<td>3.03</td>
<td>10.3</td>
<td>14.4</td>
<td>8.27</td>
</tr>
<tr>
<td>1985</td>
<td>14</td>
<td>2.7</td>
<td>6135</td>
<td>4.3</td>
<td>28.8</td>
<td>3.46</td>
<td>13</td>
<td>16.4</td>
<td>13.89</td>
</tr>
<tr>
<td>1986</td>
<td>14</td>
<td>0</td>
<td>7239</td>
<td>7.18</td>
<td>32.7</td>
<td>3.51</td>
<td>2.53</td>
<td>16.2</td>
<td>1.21</td>
</tr>
<tr>
<td>1987</td>
<td>14</td>
<td>0</td>
<td>7971</td>
<td>5.94</td>
<td>39.4</td>
<td>3.60</td>
<td>8.64</td>
<td>16.5</td>
<td>1.85</td>
</tr>
<tr>
<td>1988</td>
<td>15</td>
<td>7.4</td>
<td>8355</td>
<td>6.2</td>
<td>0.39</td>
<td>1.60</td>
<td>12.3</td>
<td>17.7</td>
<td>7.27</td>
</tr>
<tr>
<td>1989</td>
<td>17.3</td>
<td>15.3</td>
<td>8283</td>
<td>4.69</td>
<td>62.2</td>
<td>3.79</td>
<td>13.8</td>
<td>20.6</td>
<td>16.38</td>
</tr>
<tr>
<td>1990</td>
<td>18.8</td>
<td>8.7</td>
<td>8572</td>
<td>4.19</td>
<td>57.1</td>
<td>3.76</td>
<td>17.8</td>
<td>22.9</td>
<td>11.16</td>
</tr>
<tr>
<td>1991</td>
<td>19</td>
<td>1.1</td>
<td>8151</td>
<td>1.44</td>
<td>18.8</td>
<td>3.27</td>
<td>20.1</td>
<td>27.5</td>
<td>16.72</td>
</tr>
<tr>
<td>Year</td>
<td>Inflation Rate</td>
<td>change</td>
<td>GDP (in constant 2010 prices)</td>
<td>GVA (in constant 2010 prices)</td>
<td>GVA per Capita</td>
<td>GDP per Capita</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>--------</td>
<td>-----------------------------</td>
<td>-------------------------------</td>
<td>----------------</td>
<td>---------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>21.1</td>
<td>11.1</td>
<td>8209</td>
<td>0.80</td>
<td>6.36</td>
<td>2.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>30</td>
<td>42.2</td>
<td>5752</td>
<td>0.35</td>
<td>146</td>
<td>4.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>36.2</td>
<td>20.7</td>
<td>7148</td>
<td>2.63</td>
<td>7.43</td>
<td>2.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>28.8</td>
<td>20.4</td>
<td>9046</td>
<td>4.41</td>
<td>42.3</td>
<td>3.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>33.8</td>
<td>17.4</td>
<td>12046</td>
<td>4.15</td>
<td>109</td>
<td>4.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>30.2</td>
<td>10.6</td>
<td>13116</td>
<td>0.475</td>
<td>62.1</td>
<td>3.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>29.5</td>
<td>2.3</td>
<td>14094</td>
<td>3.29</td>
<td>26.5</td>
<td>3.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>22.4</td>
<td>24</td>
<td>12896</td>
<td>3.72</td>
<td>52</td>
<td>5.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>22.3</td>
<td>0.04</td>
<td>12705</td>
<td>4.05</td>
<td>111</td>
<td>9.98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>19.7</td>
<td>11.6</td>
<td>12986</td>
<td>2.72</td>
<td>5.3</td>
<td>5.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>18.5</td>
<td>6</td>
<td>13148</td>
<td>3.44</td>
<td>27.6</td>
<td>1.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>16.6</td>
<td>10.27</td>
<td>14905</td>
<td>3.91</td>
<td>81.7</td>
<td>9.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>12.5</td>
<td>24.7</td>
<td>16095</td>
<td>3.66</td>
<td>46.1</td>
<td>11.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>12.9</td>
<td>3.2</td>
<td>18738</td>
<td>3.33</td>
<td>21.2</td>
<td>10.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>13.6</td>
<td>5.4</td>
<td>25826</td>
<td>3.71</td>
<td>50.7</td>
<td>14.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>13.3</td>
<td>2.2</td>
<td>31958</td>
<td>4.86</td>
<td>729</td>
<td>9.76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>14</td>
<td>5.3</td>
<td>35895</td>
<td>3.98</td>
<td>95.6</td>
<td>26.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>14.8</td>
<td>5.4</td>
<td>37022</td>
<td>4.06</td>
<td>116</td>
<td>9.23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>14.4</td>
<td>2.7</td>
<td>40000</td>
<td>4.25</td>
<td>178</td>
<td>3.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>15</td>
<td>4.1</td>
<td>41953</td>
<td>4.15</td>
<td>140</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>19.7</td>
<td>31.3</td>
<td>50410</td>
<td>4.21</td>
<td>163</td>
<td>9.38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>17.3</td>
<td>12.1</td>
<td>55101</td>
<td>4.57</td>
<td>372</td>
<td>5.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>16.5</td>
<td>4.6</td>
<td>61395</td>
<td>4.97</td>
<td>944</td>
<td>6.88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Kenya National Bureau of Statistics (KNBS), The World Bank, World Development Indicators, and own calculations