

**THE EFFECT OF FOREIGN DIRECT INVESTMENT ON ECONOMIC  
GROWTH IN KENYA**

**BY:**

**MITCHELLE DAISY KHADENJE**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENT FOR THE AWARD OF THE MASTER OF  
SCIENCE IN FINANCE DEGREE, UNIVERSITY OF NAIROBI**

**OCTOBER, 2015**

## DECLARATION

This research project is my original work and has not been presented for examination in any other University or institution of higher learning for any academic award.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

**Mitchelle Daisy Khadenje**

**D63/72639/2014**

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

Signed: ..... Date: .....

**Mr. Herrick Ondigo**

Lecturer,

Department of Finance and Accounting,

School of Business,

University of Nairobi.

## **ACKNOWLEDGEMENTS**

The successful completion of this research would not have been possible without the support of several people. First and foremost, I would like to greatly thank the Almighty God for enabling me to make it through the whole study and research phase. I owe the good health, strength, will and zest to the grace He has given me through my studies.

I would like to express my sincere gratitude to my supervisor, Mr. Herrick Ondigo, for continually guiding me through my research. His erudite supervision and advice positively guided me through the whole study.

I also am grateful to my parents, Mr. Sheldon Mugogo and Mrs. Beatrice Wafula, and my brother, Arnold Mugogo for their continuous emotional and financial support, encouragement and prayers throughout my study. Their incessant encouragement, more so my father gave me the zeal to put in extra effort to yield great results in the study.

Lastly, I would like to thank my friends who played a huge role in keeping me up to task with the progress of my research.

## **DEDICATION**

I dedicate this study to my family, for their unwavering support, encouragement, patience and all through the academic period. God bless you abundantly.

# TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>ii</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>iii</b>
<b>DEDICATION.....</b>	<b>iv</b>
<b>LIST OF TABLES.....</b>	<b>viii</b>
<b>LIST OF FIGURES.....</b>	<b>ix</b>
<b>LIST OF ABBREVIATIONS.....</b>	<b>x</b>
<b>ABSTRACT.....</b>	<b>xi</b>
<b>CHAPTER ONE.....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the study .....	1
1.1.1 Foreign Direct Investment .....	2
1.1.2 Economic Growth .....	4
1.1.3 Foreign Direct Investments and Economic Growth.....	5
1.1.4 Foreign Direct Investment and the Kenyan Economy .....	6
1.2 Research Problem.....	7
1.3 Objective of the study .....	9
1.4 Value of the study .....	9
<b>CHAPTER TWO.....</b>	<b>10</b>
<b>LITERATURE REVIEW.....</b>	<b>10</b>
2.1 Introduction .....	10
2.2 Theoretical Review .....	10
2.2.1 Location Theory of International Investment .....	10
2.2.2 Neoclassical Theory .....	11
2.2.3 Product Life Cycle Theory.....	12
2.2.4 Solow Type Growth Theory.....	13
2.2.4 The Electric Paradigm Theory .....	14
2.3 Determinants of Economic Growth .....	15
2.3.1 Foreign Direct Investment .....	15

2.3.2 Investment.....	16
2.3.3 Interest Rates.....	17
2.3.4 Inflation.....	17
2.3.5 Human Capital .....	17
2.3.6 Economic Policies.....	18
2.3.7 Innovation, Research and Development .....	19
2.3.8 International Trade.....	20
2.3.9 Foreign Exchange .....	20
2.4 Empirical Review .....	21
2.4.1 International Empirical Review .....	21
2.4.2 Local Empirical Review.....	22
2.5 Summary of the Literature Review .....	24
<b>CHAPTER THREE.....</b>	<b>26</b>
<b>RESEARCH METHODOLOGY.....</b>	<b>26</b>
3.1 Introduction .....	26
3.2 Research Design.....	26
3.3 Data Collection.....	26
3.4 Data Analysis .....	27
3.4.1 Analysis Model .....	27
3.4.2 Test of Significance .....	28
<b>CHAPTER FOUR.....</b>	<b>30</b>
<b>DATA ANALYSIS, FINDINGS AND</b>	
<b>INTERPRETATION.....</b>	<b>30</b>
4.1 Introduction .....	30
4.2 Descriptive Statistics.....	30
4.2.1 GDP, FDI, Inflation Rate, Interest Rate and Foreign Exchange .....	30
4.2.2 GDP Statistics from 1984-2014 .....	31
4.2.3 FDI Statistics from 1984-2014.....	32
4.2.4 Inflation Rate Statistics from 1984-2014 .....	32
4.2.5 Foreign Exchange Statistics from 1984-2014.....	33

4.2.6 Interest Rate Statistics from 1984-2014.....	34
4.3 Inferential Statistics.....	35
4.3.1 Correlation Analysis .....	35
4.3.2 Regression Analysis and Hypothesis Testing .....	36
4.3.3 Analysis of Variance.....	37
4.4 Interpretation of Research Findings.....	39
<b>CHAPTER FIVE.....</b>	<b>41</b>
<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS.....</b>	<b>41</b>
5.1 Introduction .....	41
5.2 Summary .....	41
5.3 Conclusion.....	42
5.4 Recommendations for Policy and Practice.....	43
5.5 Limitations of the study.....	43
5.6 Suggestions for further Research .....	44
<b>REFERENCES.....</b>	<b>47</b>
<b>APPENDICES.....</b>	<b>53</b>
APPENDIX 1: GDP RAW DATA.....	53
APPENDIX 2: FDI RAW DATA.....	51
APPENDIX 3: ANNUAL INFLATION RATES RAW DATA.....	51
APPENDIX 4: ANNUAL INTEREST RATES RAW DATA.....	51
APPENDIX 5: ANNUAL FOREIGN EXCHANGE RATES RAW DATA.....	51

## LIST OF FIGURES

Figure 4.1 Gross Domestic Product .....	30
Figure 4.2 Foreign Direct Investments .....	31
Figure 4.3 Inflation rate .....	32
Figure 4.4 Exchange rate .....	32
Figure 4.5 Interest rate .....	33



## **LIST OF ABBREVIATIONS**

<b>AERC</b>	African Economic Research Consortium
<b>CBK</b>	Central Bank of Kenya
<b>COMESA</b>	Common Market for Eastern and Southern Africa
<b>FDI</b>	Foreign Direct Investment
<b>GDP</b>	Gross Domestic Product
<b>IMF</b>	International Monetary Fund
<b>M&amp;As</b>	Mergers and Acquisitions
<b>MNCs</b>	Multinational Corporations
<b>MNEs</b>	Multinational Enterprises
<b>NEPAD</b>	New Partnership for Africa's Development
<b>OECD</b>	Organization for Economic Co-operation and Development
<b>R&amp;D</b>	Research and Development
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>US</b>	United States

## **ABSTRACT**

Foreign Direct Investments (FDI) is defined as investment made to acquire lasting or long-term interest in enterprises operating outside the economy of the investor while Economic Growth is generally defined as an increase in the production and consumption of goods and services. Among the key determinants of economic growth are most significantly, investments, then international trade, human capital, innovation, research and development and economic policies. Investments, in this case FDI, contributes to economic growth by injecting funds into an economy, spurring increased production, skills enhancement, infrastructure development and employment, all of which constitute economic growth.

The study sought to determine the effect of foreign direct investments on economic growth in Kenya. A descriptive survey research design was employed for this study due to its appropriateness in enabling description of characteristics of particular groups, estimation of various proportions in these cohorts and its value in making predictions. Quantitative, secondary data obtained from the Central Bank of Kenya, Kenya National Bureau of Statistics, United Nations Conference on Trade and Development and World Bank databases were used based on the information of the variables in use over a period of 31 years (1984-2014). The data was analyzed through descriptive analysis and further through content analysis.

The findings of this study may be useful to future researchers on similar studies, scholars, academicians and policy makers examining the effect of FDI on economic growth in Kenya and possible ways of enhancing economic growth in the country. It was established that FDI, interest rates, inflation rates and foreign exchange rates have a direct impact on economic growth in Kenya, concluding that FDI positively affect Kenya's economic growth. The study recommends implementation of feasible monetary and fiscal policies by the government and policymakers in order to attract more FDI inflows into the country and achieve greater economic growth.

## CHAPTER ONE

### IN TRODUCTION

#### 1.1 Background of the Study

International business activity has been of key dependence since time immemorial characterized by economic activity that included Foreign Direct Investments (FDI), joint ventures and strategic alliances (Moore and Lewis, 1999). The most common motivation of FDI has been resource-seeking (Dunning, 1993; Jones, 1995). Economists believe that FDI is an important element of economic development in mostly developing countries and hence the need for improved economies, technological advancement, economic growth, poverty alleviation and improved standards of living has seen Africa's nations strive to get Foreign Direct Investments injected into their economies to help achieve these. Technological advancement has seen the continent improve on its processes as a result of dynamism as globalization is the most salient feature of today's quest for encouraging cross-border investment by Multinational Corporations (MNCs) and firms. Consequently, many countries in Africa are striving to attract FDI because of its attributable benefits to economic growth. This can be evidenced by the formation of the New Partnership for Africa's Development (NEPAD), which has the attraction of foreign investment to Africa as a major component (AERC Research Paper 165).

Blomstrom (1994) gives evidence to support that FDI promotes competitiveness of the local firms and Smarzynska (2002) found out that suppliers in host economies benefited spill over from supplying foreign investors. Efforts made by various countries in attracting FDI are due to potential positive effects this would have on economy Caves (1996). These advantages are such as technological advancement, improved skills and productivity; increased employment

enhanced international market relations and access to external markets. Kenya, in particular, has been among the continent's fastest growing economies owing to the increased entrepreneurship that has been witnessed in the recent past. More Kenyans are seeking extra income so as to meet the current otherwise high living standards. There, however, have been major setbacks in achieving the country's ultimate development goals such as the vision 2030. This has been as a result of inadequateness of proper resources for long-term development, as well as low capacity utilization.

Extensive research has been carried out in a bid to determine whether or not FDI can help trigger economic growth in the receiving countries. Several scholars are convinced that FDI has largely negative effects on the developing countries while some argue that its effects are largely positive. Hanson (2001) and Greenwood (2002) argue that the positive effects may be minimal. However, Findlay (1978), UNCTAD (1997), Borensztein (1998) and Ikiara (2002), acknowledge that FDI is the bridge to the technology and resource gap of underdeveloped countries by providing technological expertise, capital, management and marketing skills, facilitating access to foreign markets and generating both technological and efficiency spillovers to local firms provided the right policies and business conditions available. Consequently, large players in the international market are investing in SMEs through venture capitalism as well as franchising their companies locally, and thus breeding more foreign direct investment in Africa, and more so, in Kenya.

### **1.1.1 Foreign Direct Investment**

Foreign Direct Investment is an investment made to acquire lasting or long-term interest in enterprises operating outside the economy of the investor, according to the International Monetary Fund (IMF) (IMF 1993). It is further defined as a cross-border investment by a resident entity in one economy with the objective of obtaining a lasting interest in an enterprise

resident in another economy by the Organization for Economic Co-operation and Development (OECD). From a macroeconomic view, it is a specific form of capital flows across borders which are found in the balance of payments. By having a long-term relationship, the direct investment enterprise gives the investor a huge stake in management of the enterprise. A direct investment can be said to be established if the direct investor has acquired ten percent or more than the ordinary share in an enterprise outside their home country.

The implementation of FDI may take various forms such as a greenfield investment, cross-border merger and acquisitions (M&As) or joint ventures. Both parties (Foreign Direct Investor and Host Country) are committed to availing their skills and expertise to the investment operation such as the knowledge of local or national market and bureaucracy, financial capability and technical expertise (Moosa, 2002). FDI is thus a positive consequence of globalization that is characterized by the amalgamation of the local economic system and global markets. This further elaborates how less developed countries get support from developed nations to enable them acquire materials and equipment and utilize available natural resources for economic development (Sacerdoti, 1997).

FDI can further be classified into horizontal, vertical and conglomerate FDI so as to distinguish the operational view of the foreign country (source of investment) and the host country. Horizontal FDI refers to an investment operation aimed at the horizontal expansion of production and is characterized by the lack of product differentiation between that produced at home and that in the host country. Vertical FDI, on the other hand, is undertaken with the aim of gaining economic advantages that an investor derives from a better management of their organizational chain. Lastly, conglomerate FDI represents a mix of both horizontal and vertical FDI (Moosa, 2002).

### **1.1.2 Economic Growth**

An economy can be defined as the wealth and resources of a country or region in terms of the production and consumption of goods while growth is defined as the process of increasing in size. Economic growth is therefore defined as an increase in the production and consumption of goods and services. It is indicated by increasing real gross domestic product (GDP) or the real gross national product (GNP). It can further be defined as an increase in the production and consumption of goods and services (Knack, 1995). Economic growth is a positive consequence of economic development in the sense that economic development is the process whereby an economy's real national income as well as per capita income increases over a relatively long period of time. Economic growth can thus be summed up as a process comprising intertwining changes in fundamental factors of supply and in the structure of demand, leading to a rise in the net national product of a country in the long run.

Measures of economic growth include GDP, per capita national income, changes in supply of natural resources, rate of capital formation, demographic composition, technology, scientific and technological knowledge, skills and efficiency, institutional or organizational set-up, in the structure of demand for goods, in the level and pattern of income distribution, in the size and composition of population, consumption habits, living standards and in the patterns of social relationships and religious dogmas and ideas. However, the most widely used is per capita national income whereby an increase in per capita income serves as a clear indicator of an improvement in economic welfare. Physical capital (Human Capital) also acts as a key determinant of economic growth as it brings about the concept of broad capital characterized by constant or increasing returns to scale (Lucas, 1993; Rebello, 1991).

### **1.1.3 Foreign Direct Investments and Economic Growth**

Several studies on the relationship between FDI and Economic Growth reveal that the effects of FDI are complex. Some theorists argue that FDI has largely positive impact on the host country's economy while others argue that these effects are largely negative. From a macroeconomic point of view, these effects are regarded as generators of employment, high productivity, competitiveness and technology spillovers. FDI results in higher exports, access to international markets and international currencies as an important source of financing to substitute bank loans, more so in developing countries. Bloomstrom (1994), Smarzynska (2002) and Caves (1996) affirm that FDI has largely positive effects on the host country's economy, characterized by increased competitiveness and supplies spillovers respectively.

MNCs make entry into different foreign markets due to existent market failures that attract FDI and give them an advantage in those markets. Due to their superior technology, know-how, skills and expertise, foreign investors consider this as an opportunity to obtain market share. Factors that affect MNCs are more likely to affect the magnitude and direction of FDI, in that, the operations and input adopted by the MNCs pose as large competition to the host firms because of the lack of skill and necessary technological advancement. Developing countries with local firms engaging in similar competitive activities to a large extent, despite change of economic policies, cannot match the MNC's advancement and resort to improving domestic market conditions, corporate taxes, subsidies and privatization to attract FDI.

In a world characterized by perfect competition, FDI would not exist (Kindleberger, 1969). Barriers to trade or competition would not exist if markets work effectively. Thus, the MNC should possess advantages over host firms that allow their investment to be viable and the market to these advantages must be imperfect. The possibility of FDI having a negative impact on the

host country's economy is supported by other researchers. They argue that FDI may crowd out local enterprises and hence have a negative impact on economic development. Hanson (2001) argues that the positive effects of FDI on economic growth are very few. Greenwood (2002) also argues that most effects of FDI on economic growth would be negative. Lipsey (2002) argues that despite the positive effects, there is no consistent relationship between FDI and economic growth.

It can be said that FDI's role in economic growth may be ambiguous (De Mello, 1997). However, FDI can be said to be a catalyst for growth output, capacity utilization, capital accumulation and technological progress which results in creation of employment opportunities, development of productive capacity, skills and enhancement of local labour, technological advancement and integration with the rest of the world.

#### **1.1.4 Foreign Direct Investment and the Kenyan Economy**

Various GDP trends over time have been characterized by declining growth rates (1985-2002), growth periods (2002-2009) and recovery phase (2010). Kenya has so far been appraised as having one of the fastest growing economies by Diareitou Gaye, current World Bank Country Director for Kenya: "Kenya is emerging as one of Africa's key growth centres with sound economic policies in place for future improvement". This shows that Kenya has great potential for economic growth, further evidenced by the recent World Bank forecast that the Kenyan Economy is likely to expand by 6.9 percent in 2015. However, these forecasts may not be achieved in the absence of suitable market conditions to facilitate economic development such as improved infrastructure and technological advancement.

FDI in Kenya grew steadily from 1970s due to its relatively high level of development, improved infrastructure, larger market size, economic growth and openness to FDI (UNTCAD, 2006). FDI



started at a low of around ten million US Dollars in the early 1970s before peaking at eighty million US Dollars in 1979-1980. However, despite the significant progress, FDI inflows in the country have not been able to match the standards of the developed countries as it has continuously been below the African average most of the time. FDI is however expected to result in integration of the continent and hence, the nation, into the global economy so as to bring about economic growth and alleviate poverty (Ikiara, 2002).

## **1.2 Research Problem**

Globalization drive today is conscious encouragement of cross-border investments, especially by Multinational corporations and firms (MNCs). Many developing countries now acknowledge that attracting FDI is an important element in their strategy for economic development. This is because FDI is seen as an intertwining mix of capital, technology, marketing and management. Unfortunately, the efforts of most countries in Africa to attract FDI have been futile. This is in spite of the perceived and obvious need for FDI in the continent. The development is disturbing, sending very little hope of economic development and growth for these countries. Further, the pattern of the FDI that does exist is often skewed towards extractive industries, meaning that the differential rate of FDI inflow into sub-Saharan African countries has been adduced to be due to natural resources, although the size of the local market may also be a consideration (Morriset 2000; Asiedu, 2001).

The effect of FDI on economic growth in various countries has been a topic of study so as to find out whether these effects are positive or negative. Bajona and Kehoe (2006) discussed neoclassical theories within the Hecksher-Ohlin framework but criticize these theories on the basis that they were founded on the assumption of perfect market conditions and thus FDI can only have a positive effect on economic growth. In the event if perfect market conditions, foreign

investment is done when the home investments have reached an optimal level and any further investment can suffer diminishing returns to scale (Theory of the Firm).

FDI should result in higher exports, access to international markets and international currencies as an important source of financing to substitute bank loans, more so in developing countries. Bloomstrom (1994), Smarzynska (2002) and Caves (1996) affirm that FDI has largely positive effects on the host country's economy, characterized by increased competitiveness and supplies spillovers respectively. Productive FDI should bring long lasting and stable capital flows as they are invested in long term assets. These funds are introduced into a country's economy contributing to the aggregate demand of the economy, and therefore to the growth of the economy of a country. Productivity by local firms is witnessed as a result of competition brought in by FDI by the foreign investor (competitor). Castilla (2005) further argues that employment generation is another positive consequence of FDI.

Given all these scholars review and arguments on whether or not FDI bring about long-lasting positive impacts on the economic growth of the host country, the answer as to whether or not FDI has positive or negative impacts is not clear. Some scholars and theorists argue that FDI has major positive impact on economic growth of the host country (Ikiara (2002), UNIDO (2002), UNCTAD (1997)) while others strongly believe that FDI has strong negative impacts on the host country (Colen, 2009 and Sindre, 2011).

Due to the non-existence of a final decision on the research question which is how FDI affects economic growth, this study seeks to answer the research question through a case study of the effect of FDI on economic growth in Kenya. By evaluating various theoretical reviews, literature review, this study seeks to shed light on the answering the research question that is: Does FDI have a positive effect on economic growth in Kenya?

### **1.3 Objective of the study**

To determine the effect of foreign direct investment on economic growth in Kenya.

### **1.4 Value of the study**

This study will be important in elaborating the significance of FDI to Economic Growth in Kenya and help authorities to re-evaluate foreign relations as well as take measures that will help reap the positive benefits of FDI. This study is also important because FDI stimulates economic growth and spurs economic development as a whole. The study will be a vital tool for policy makers in developing countries as the evidence herein will provide guidelines on how to improve their economic policies so as to attract more FDI in their countries.

The findings of this study will serve as a good tool for academicians as well as investors to evaluate the importance of FDI on Economic Growth in Kenya. These findings will also serve as a reference tool for researchers seeking to find out the effect of FDI on economic growth. As a result, it is expected that they will come up with mechanisms to enhance the positive impacts of FDI on Economic Growth through such avenues as change of policy. This study therefore seeks to provide better understanding characteristics and trends of foreign direct investment activities in Kenya.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents review of empirical literature on the effect of Foreign Direct Investment on Economic Growth

#### **2.2 Theoretical Review**

The study will be guided by the location theory of international investment, neoclassical theory, product life cycle theory, Solow type growth theory, and the electric paradigm theory.

##### **2.2.1 Location Theory of International Investment**

The Location Theory of International Investment was first developed by Heinrich (1826). He notes that because transportation costs and, of course, economic rents vary across goods, different land uses and use intensities will result with increased distance from the marketplace. Location theory in itself is concerned with the geographic location of an economic activity. It comprises “supply oriented location theory” and “demand oriented location theory”. The former explains that production takes place where the factor costs (including distribution) are lowest, according to Dunning (1973). The latter, however, states that the location of a firm is governed by the location of its market and competitors.

The merger of these two theories gives rise to Multinational Enterprises (MNEs) (Buckley, 1985), by bringing together four main location factors: raw materials, cheap labour, protected and untapped markets, and transportation costs. The major limitation to this approach, however, is that it did not explain how foreign firms could outperform domestic firms in supplying their

own market as per Dunning's argument (1979). It also did not give any information on the origin of MNEs.

### **2.2.2 Neoclassical Theory**

The Neoclassical Theory was developed by Neoclassical Economists, initially introduced by Veblen in 1900. The theory was further developed by various neoclassical theorists who consider production to be directly related to reproduction. These theories examine FDI from the perspective of free trade. They believe that FDI spurs long-run growth through such variables as Research and Development (R&D) and Human Capital. The significant items under study in this theory are economic growth and development. Neoclassical theory stipulates that international capital flows with differentiated rates of return across countries lead to capital arbitrage, where capital seeks the highest rate of return. It examines FDI from the perspective of free trade, with elements such as tax regime and macroeconomic policies affecting FDI.

Bajona and Kehoe (2006) discussed explanations of multinational production based on neoclassical theories of capital movement and trade within the Heckscher-Ohlin framework. They, however, criticize these theories on the basis that they were founded in the assumption of existence of good markets and were therefore unable to provide satisfactory explanation of the nature and pattern of FDI. They elaborate further that by this theory, FDI would not take place in the absence of market imperfections. Cockcroft and Riddell, 1991 also argue that future investment flows are directly related to the package of incentive and consequently affect the expected rate of return; the security of the investment; the scope and speed with which companies are able to disinvest.

### **2.2.3 Product Life Cycle Theory**

The Product Life Cycle Theory was developed by Vernon in 1966 based on the experience of the U.S market. This theory was used to explain certain types of FDI made by U.S companies in Western Europe after World War II (WW2). This theory explains how trade patterns change over time. According to Vernon, the production cycle comprises four stages: innovation, growth, maturity and decline. In the first stage, the U.S companies create new innovative products for local consumption and export the surplus for the use of foreign markets. This stage characterized U.S's advantage of technology on international competitors as they were able to manufacture the needed goods.

The second stage was characterized by the MNC shifting the production to the developing country. This would help the MNC cut on export costs, gain more profits and also import some of the goods back to the home country. The third stage saw the developing country's competitor export the goods to the MNC's home country. This marked clear competition between the host country and the MNC home country, thus labelled the maturity stage because the developing country's competitors have stabilized enough to export to the MNC's country. The last stage was characterized by the developing country's markets remaining viable target markets for other MNCs due to the stabilized economy. The MNC home country market is seen to diminish.

This theory explains both trade and FDI by outlining the various phases of an MNC's Foreign Direct Investment and the changes over time. New products are introduced to meet the local needs. These new products are first exported to similar countries with similar needs, preferences and incomes. Increase in sale of the new product attracts competitors and an increase of demand through exports to advanced countries occurs. Further innovation in production, cost reduction and market process takes place and manufacturing is shifted to foreign countries. Worldwide

production through exports declines as a result of large scale production and manufacturing is shifted to developing countries, making technology standard. Market for the product concentrates in the less developed countries and demand shifts to the developed countries, making the original innovator the importer.

#### **2.2.4 Solow Type Growth Theory**

This theory was developed independently by Solow and Swan in 1956 through the Solow-Swan Model. It attempts to explain long-run economic growth by looking at capital accumulation, labour or population growth, and increases in productivity, commonly referred to as technological progress. Under this theory, FDI enables countries to achieve investment that exceeds their own domestic savings and enhances capital formation as output growth is confined to the short run. The standard Solow model predicts that in the long run, growth is achievable only through technological progress. The key assumption of this growth model is that capital is subject to diminishing returns in a closed economy. Given a fixed stock of labour, the impact on output of the last unit of capital accumulated will always be less than the one before.

De Mello (2000) states that given the diminishing marginal returns to physical capital, the recipient economy could converge to the steady state growth rate as if FDI on the long run had never taken place in leaving no permanent impact on the growth of the Economy. This suggests that the potential beneficial impact of FDI is confined to the short run. Mankiw (2003) however argues that, applying the Solow Growth Model, private Businesses invest in traditional types of capital such as bulldozers and steel plants and newer types of capital such as computers and robots. Government, on the other hand, invests in various forms of infrastructure such as roads, bridges and sewer systems. He further argues that policy makers trying to stimulate growth must

confront the economy needs. Mankiw (2003) seeks to establish the kind of capital that yields the highest marginal products.

### **2.2.5 The Electric Paradigm Theory**

This is the famous ownership, location and internalization (OLI) paradigm, otherwise known as the Electric Paradigm theory developed by Dunning (1988). This theory constitutes three different theories of FDI (O-L-I); Ownership, Location and Internalization advantages. Ownership in this case makes reference to intangible assets exclusively owned by the Investing Company and may be transferred among MNCs at a relatively low cost. This is likely to result in higher incomes or reduced costs. However, there are additional operational costs faced by the MNC due to operations in different countries. The MNCs therefore need to have certain elements that would outshine the operating costs they have to bear in a foreign market so as to successfully enter the foreign market. These ‘elements’ are the advantages such as property competencies, entrepreneurial skills, production technique, trademarks, economies of scale, greater access to financial capital, technological know-how and patents. Ownership specific advantages refer to the competitive advantages of the enterprises seeking to engage in FDI. The types of specific advantages include monopoly, large economies and technology advantages. Owing to the firm’s monopoly on its specific benefits, the use of these benefits in a foreign market results in higher marginal profitability or lower marginal costs than other competitors in the foreign market (Dunning, 1973, 1980, 1988).

Location advantages are key determinants of host countries during the MNC’s screening process when looking for a suitable location to invest in. The specific advantages to the country here are economic benefits comprising of both quantitative and qualitative factors of production, transport costs, existence of raw materials, technological advancement and the market itself, political



benefits such as government policies and special taxes that affect FDI inflows and social advantages such as cultural diversity and behavioural changes such as attitudes towards strangers. The more the immobile, natural or created resources, which firms need to use jointly with their own competitive advantages, the more firms will choose to augment or exploit their specific advantages by engaging in FDI.

The imperfect market situation enables foreign firms exploit host country opportunities and as a result, competition with the MNC by the host firms proves difficult due to the superiority of the MNC to the host firms. This may in turn make the foreign investors to crowd out domestic investments as explained by Miberg (1966). Yarbrough & Yarbrough (2002) argue it has widely contributed to international production theory despite only listing the necessary conditions without explaining the phenomenon. Aiello et al. (2009) also argues that other things being equal, a change in infrastructure expenditure influences the cost faced by the firm in adjusting its current capital stock to the target level.

### **2.3 Determinants of Economic Growth**

Economic growth has attracted increasing attention in both theoretical and empirical research over the past decade. Despite lack of a unifying theory that discusses the role of various factors in determining economic performance and growth, there are several partial theories that discuss this. Solow (1956) through the Solow type theory emphasises the importance of capital accumulation. Romer (1986, 1990) and Lucas (1988) discuss the endogenous growth theory which has drawn attention to human capital and innovation capacity. Below are the main determinants of Economic Growth:

### **2.3.1 Foreign Direct Investment**

Foreign Direct Investment also affects economic growth through internationalization of economic activity and technology transfer. The foreign direct investment made by an MNC to a host country results in improved operations, skills advancement and employment opportunities, all of which contribute to economic growth. Empirical studies such as Borensztein (1998), Hermes and Lensink (2002) and Lensink and Morrissey (2001) provide evidence that FDI indeed has a positive impact on economic growth.

The Capital theory explains that FDI, like other forms of direct investment, was seen as a response to differences in the rates of return on capital between countries. This suggestion was reinforced by the empirical observation that American firms which were major source of FDI in the 1950s obtained a higher rate of return from their European investments than at home (Mundell, 1960). However, the deficiencies of this approach were that the differential rate of return hypothesis was not consistent with several observed characteristics of international investment (Hymer, 1960).

### **2.3.2 Investment**

Investment is the most fundamental determinant of economic growth identified by both neoclassical and endogenous growth theories. It has impact on the transitional period as per the neoclassical theories. The endogenous growth theory identifies that it has more permanent effects. Mankiw (1992), Sala-i-Martin (1997) and Bond et al (1997) examine the relationship between investment and economic growth. Thus investment is a key driver of economic growth. By injecting funds into an economy, investment spurs increased production, skills enhancement, infrastructure development and employment, all of which constitute economic growth.

According to the endogenous growth theory, there are increasing returns to scale from capital investment especially in infrastructure. Development of infrastructure may be characterized by the development of roads, social amenities and communication networks. With such development comes enhanced productivity and improved service delivery. All this go hand in hand in developing an economy and thereby constituting economic growth as a whole. The Solow type theory also emphasises the importance of capital accumulation through investment. The more capital injected into an economy, the more development takes place. This in turn results in economic growth due to the economic development.

### **2.3.3 Interest Rates**

Prevailing interest rates on inflation rate have a significant impact on Investment. High interest rates result in more saving s culture among the investors in an economy so as to reap on the high returns that are as a result of high interest rates. Low interest rates on the other hand result in more borrowing amongst investors because they are able and willing to bear the relatively low cost of borrowing. Active borrowing and lending in an economy spurs economic growth overally and when done on an international platform, results in economic development among countries.

### **2.3.4 Inflation**

Inflation is a condition, when cost of services coupled with goods rise and the entire economy seems to go haywire. A rise in the CPI indicates inflation. The CPI or the consumer price index is used as an index for salaries, wages, contracted prices, pensions. This is done to adjust with the inflation effects. The gross domestic product is another important economic indicator and is usually inflation adjusted. This is an important tool for measuring the rate of inflation.

### **2.3.5 Human Capital**

Human capital refers to workers' acquisition of skills and know-how through education and training. Human capital is identified as the main determinant of economic growth as explained by several endogenous models and an extension of the neoclassical growth model. Several studies evidence that educated population is a key determinant of economic growth as examined by Barro (1991), Mankiw (1992) and Hanushek and Kimko (2000) and concluded that human capital is indeed a substantial determinant of economic growth. Presence of skilled human labour results in efficiency in operations, resulting in increased production, then increased sales and finally economic growth.

Accumulation of human capital can be brought about by on-the-job training or by education. Development theory has always regarded education as an important engine for economic growth. Despite the importance of human capital in the old development theories, the traditional Solow theory does not consider human capital as a key driver for economic growth. The theory considers exogenous labour augmenting technological progress, which is inventions that allow producers to generate the same amount of output with relatively less labour input, whereas human capital is the general skill level of a worker. However, Mankiw, Romer and Weil reformulated the traditional Solow-Swan model by taking human capital into account. They concluded that human capital is a key production factor that greatly contributes to economic growth.

### **2.3.6 Economic Policies**

Economic policies are also a key determinant of economic performance and growth as laid out by Barro and Sala-i-Martin (1995). They are considered a key determinant of economic growth because they set out a framework within which economic growth takes place. Economic policies

influence the economy through investment in human capital and infrastructure and improvement of legal and political institutions. A stable political country, good legal institutions result in stabilized economies. Economic policy alleviates inequalities.

The strength of the formal and informal institutions determines the policy outcome: the market, the state, the family and the civil society. The product life cycle theory explains changes in trade patterns over time. Host countries with economic policies such as tax incentives for the foreign country attract more FDI. The initial stage is characterized by little or no competition but at maturity, there is competition and stability. This shows economic development over the stages and consequently economic growth. The electric paradigm theory highlights ownership and internalization advantages. Economic policies that allow the foreign country to have ownership of their foreign direct investments to a large extent attract FDI in the developing country. Internalization through imperfect market situation also allows foreign firms to exploit host country opportunities. Economic policies that allow competition between the MNC and the host firm as a result of the imperfect market situation spurs further economic development. This in turn leads to economic growth.

### **2.3.7 Innovation and Research and Development**

Innovation and Research and Development (R&D) activities influence economic development positively through the increase of growth and productivity. Improved technology results in production of new, improved and superior products and processes. Romer (1986, 1990) and Lucas (1968), through the endogenous growth theories, indicate that the introduction of new accumulation factors such as knowledge and innovation will induce self sustained economic growth. This will in turn lead to divergent growth patterns and development of the economy as a whole.

The Solow theory, through the Solow model, assumes an exogenous rate of technological progress. However, in practice, most technological improvements are due to deliberate actions such as R&D carried out in research institutes or firms. In the new growth theory, there is considerable attention to the modelling of R&D, hence making technological progress endogenous. Thus, technological progress is a key determinant of economic growth in the endogenous growth theory. Accumulation of knowledge stimulates growth, which in turn stimulates capital accumulation (Romer 1990). Hence, technological change emerges from technological innovations generated by R&D and productivity-enhancing developments.

### **2.3.8 International Trade**

International Trade is the exchange of goods and services between different countries. International trade and its impact on economic growth crucially depend on globalization. Developing countries, which have followed trade liberalization policies, have experienced all the favourable effects of globalization and international trade. China and India are regarded as the trend-setters in this case. International trade opens up the opportunities of global market to the entrepreneurs of the developing nations. International trade also makes the latest technology readily available to the businesses operating in these countries. It results in increased competition both in the domestic and global fronts.

To compete with their global counterparts, the domestic entrepreneurs try to be more efficient and this in turn ensures efficient utilization of available resources. Open trade policies also bring in a host of related opportunities for the countries that are involved in international trade. The growth of emerging economies has been one of the major factors in the rapid increase in trade. In the early-to-mid 2000s emerging economies experienced GDP growth of up to 6% while advanced economies hovered just under 2%.

### **2.3.9 Foreign Exchange**

International trade can be gauged by the foreign exchange rate. The basic argument for which an increase in exchange rate volatility would result in lower international trade is that there are risks and transaction costs associated with variability in the exchange rate, and these reduce the incentives to trade.

In summary, the relationship between the two variables is most likely driven by underlining long-term policy credibility rather than the short-term causality (Klein and Shambaugh, 2006; Qureshi and Tsangarides, 2010). In addition, any relation between volatility and international trade could be driven by reverse causality, in which trade flows help stabilize real exchange rate fluctuations, thus reducing exchange rate volatility (Broda and Romalis, 2010).

## **2.4 Empirical Review**

This section reviews evidence of several empirical studies by both international and local scholars and authors.

### **2.4.1 International Empirical Review**

Khaliq and Noy (2007) studied the impact of FDI and Economic growth through a case study in Indonesia for the period 1997-2006. In order to determine the effect of FDI on economic growth, they reviewed previous literature on the topic and carried out an analysis over the stated period. They acknowledge that previous literature found a positive effect of inward FDI on economic growth. They found out that, at aggregate level, FDI does indeed appear to have positive effect on economic growth. However, at a sectoral level, the effects of FDI on economic growth vary across sectors and no aggregate effects are observed.

Buckley, Clegg and Wang (2007) studied the relationship between FDI and Spillover effects. Their main objective was to determine if this relationship is linear. They undertook a case study of China. They carried out the study by reviewing previous literature, previous empirical models and using the regression model. They found that the nationality ownership of foreign investors significantly impacts upon productivity spillover effects, revealing a curvilinear relationship with FDI on data for overseas China (Hong Kong, Macau and Taiwan) MNEs but not for other (Western) firms.

Colen, Maertens and Swinnen (2008) carried out a study to determine if FDI is an engine for economic growth and human development. The study was carried out over a panel of several developing countries. They conducted the study through the use of cross-sectional analyses and trends in yearly FDI inflows to developing countries. They found that FDI can be predicted to create growth multiplier effects through vertical and horizontal spillover effects, including the transfer of technology and know-how to domestic firms and the formation of human capital.

Tang, Eliyathamby, A. Selvanathan and S. Selvanathan (2012) reviewed the extensions on the theory of FDI to host countries and empirical studies on the impact of FDI. They recognize that FDI has played an increasingly important role in world economic development, while increasingly globalization has also brought challenges to the existing FDI theories. They employed analytical models to review previous studies and empirical evidence, more so in Asia. They found that the impact of FDI on economic development of a host country, especially in developing countries, is still an ambiguous subject.

Sghaier and Zouheir (2013) sought to find out the relationship between FDI, financial development and economic growth in four North African countries: Algeria, Egypt, Morocco



and Tunisia. By analyzing different measures of Financial Development, they applied a multiple linear regression model to analyze the relationship between the given variables. They found that countries with well developed financial systems have better absorptive capacity in benefiting advantages embodied in the FDI inflows.

#### **2.4.2 Local Empirical Review**

Kinaro (2006) studied the determinants of FDI in Kenya. According to him, FDI not only provides African countries with the much needed capital for domestic investment, but also creates employment opportunities, helps transfer of managerial skills and technology, all of which contribute greatly to economic development. Further to this, he says that liberal policy frameworks have become common and are gradually losing the power to attract FDI. Through analysis of FDI levels over previous years, his study found that FDI inflows into the country were constantly decreasing.

Ngugi (2008) examined the relationship between FDI volatility and economic growth in Kenya from 1970-2010. She affirms that FDI is a key aspect of developing strategy for many developing countries and Kenya in particular. The study employed the use of various models such as the autoregressive model to determine volatility and also previous studies on economic growth and its determinants. She found that the previous studies indicated conducive business environment and favourable investment package that would attract more FDI inflow into the country. However, she concludes that, in order to maximize the benefit of FDI inflow, a central body should be established to promote and market investment opportunity so as to attract genuine capital inflow.

In his Munich Personal RePEc Archive paper, Nyamwange of the University of Nairobi (2009) explains that FDI inflows have been consistently lower than those of neighbouring countries in

recent years. Having carried out the study in Kenya, he employed a descriptive analysis approach and noted that there was a sharp rise in inflows totalling to US\$ 82 million in 2003 up from US\$ 28 million in 2002 despite having one of the most diversified economies in the East Africa Region. The main sources of FDI in Kenya as per the study were India, China, UK and Germany. The study found that the Kenyan Government attracted more FDI inflows by implementing reforms in the Legal Framework as well as abolished export and import licensing, reduced import duties, revoked export duties and current account restrictions that freed the Kenyan shillings exchange with domestic banks; all as incentives of attracting FDI.

Abala (2014), conducted a study on the impact of FDI on economic growth in Kenya and noted that Kenya has been one of the most favoured destinations of FDI in Eastern Africa. Using descriptive analysis for his qualitative data for the study, he noted that FDI steadily grew in the 1970s but greatly declined in later years due to loss of appeal to international investors. Kenya had inconsistent trends in FDI inflows since the 1780-1980 periods. The then high level of development, good infrastructure, market size, growth, political stability and openness to FDI at a time when other countries had relatively closed regimes played a huge role in making Kenya a hotspot choice for most MNCs. FDI then steadily grew from US\$ 10 million a year in the early 1970s to US\$ 60 million in 1979-1980. The study found that the decline phase of FDI inflows into the country were as a result of there being little or no further market for new MNCs to enter and achieve worthwhile returns on investment as a result of the fast growing economy and major local competition.

Ngeny and Mutuku (2014) also conducted a study on the effect of FDI in Kenya and noted in their study that Kenya has been a great recipient of FDI inflows over the years. Notable trends in sectoral composition of FDI are in Horticulture, garments and tourism. An analysis of variance

was carried out, together with test of hypothesis to analyze the data collected for the study. The study found that FDI in Horticulture and Tourism has been in response to favourable weather conditions while Garment investment has been in response to the U.S granting preferential access to its market under African Growth and Opportunities Act (AGOA). The study concluded that FDI had a large positive impact on the Kenyan economy more so through the Horticulture and Tourism Industry in Kenya.

## **2.5 Summary of the Literature Review**

The impact of FDI on Economic growth varies with the ability of hosts to take opportunity of the benefits that come along with FDI. The major limitation to the location theory of International investment is that it did not explain how foreign firms could outperform domestic firms in supplying their own market as per Dunning's argument (Dunning 1979). There is no clear distinction on whether or not MNCs intention is to largely benefit from the host developing country only. The production cycle theory on the other hand explains both trade and FDI by outlining the various phases of an MNC's foreign Direct Investment and the changes over time. However, it does not fully explain the benefits of FDI on economic growth of the host country.

Various empirical studies also do not clearly outline whether or not FDI has positive effect on economic growth of the host country. Some theorists argue that the effects are largely positive while some argue that FDI does more harm than good to the economic growth of the host country. Local regulatory framework and policies should therefore work for provision of a conducive environment for competition to take place while at the same time avoiding the spur of monopolies. The host firms should learn from the foreign direct investors in order to grow their

economy as well. De Mello (1997) explains that FDI's role in economic growth may be ambiguous. However, FDI can be said to be a catalyst for growth output, capacity utilization, capital accumulation and technological progress which results in creation of employment opportunities, development of productive capacity, skills and enhancement of local labour, technological advancement and integration with the rest of the world.

The above studies show that FDI promotes economic growth only under specific conditions. Evidence by various economists illustrates the possibility that not all types of FDI affect growth equally. Literature Review does not conclusively elaborate the beneficial effect of FDI on the economic growth of host countries. Empirical Review, on the other hand, only gives estimates but not conclusive evidence to support positive or negative effect of FDI on economic growth. The conclusive effects of FDI on economic growth as evidenced by the above literature review are largely ambiguous and hence the need for more research to determine the same.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter contains the research methodology adopted for this study. It is further categorized into research design, the data collection model and the analytical model adopted to analyze the data obtained from the records of the foreign companies that have been investing directly in the Kenyan Economy.

#### **3.2 Research Design**

The study adopted a descriptive survey research design. A descriptive survey research design is one which employs the process of disciplined inquiry through gathering and analysis of empirical data (Best and Khan, 2007). It provides information useful to the solutions of local issues. This design is appropriate where the study seeks to describe characteristics of specific groups and make predictions. It is most suitable because the study seeks to describe characteristics of various groups and make predictions. This design conceptualized the relevant factors to be considered, at the same time, saving on time and costs of undertaking the study. It will further explore the link between several macroeconomic factors such as the real Gross Domestic Product (GDP), Foreign Exchange, Inflation and Interest Rate.

#### **3.3 Data Collection**

Secondary data was used to assess the effect of FDI on economic growth in Kenya. Data on FDI, inflation rates, exchange rates and interest rates was collected from World Bank database and

UNCTAD database. A time series data over the period 1995-2015 for these variables will be used for this study.

### **3.4 Data Analysis**

Data was analyzed by grouping of related factors, tabulation and statistical inference. Multiple regression analysis was then used to find out the correlation between GDP and Foreign Direct investment. Assumptions taken due to the use of the multiple linear regression model were the assumption that there is no serial correlation of the errors in the model, the errors assume a normal distribution and that the errors have constant variance.

#### **3.4.1 Analysis Model**

The following analytical model was adapted for analysis:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon.$$

Where:

Y = Economic growth in Kenya as measured by absolute GDP values over the period.

X<sub>1</sub> = FDI as measured by equity capital and long and short-term capital. FDI will be calculated as:

$$\text{FDI} = \text{Natural log} [\text{equity capital} + \text{long term capital} + \text{short term capital}]$$

X<sub>2</sub> = Inflation rate as measured by the consumer price index. The inflation rate will be calculated as:  $\text{Inflation rate} = \frac{[\text{Current CPI} - \text{Previous CPI}]}{\text{Previous CPI}} * 100$

X<sub>3</sub> = Interest Rate as measured by the previous and current interest rates in Kenya. Change in these interest rates will be used to analyse FDI over the given period.

X<sub>4</sub> = Exchange rate measured by the nominal exchange rate and domestic price. The foreign currency in this case is the US Dollar (\$). It will be calculated as:

$$\text{Exchange Rate} = [\text{Nominal Exchange Rate} * \text{Domestic Price}] / \text{Foreign Price}$$

$\varepsilon$ = The error term

$\beta$ = coefficient of the independent variable

$\alpha$ = constant

### **3.4.2 Test of Significance**

Measures such as the t-statistic, F-test, R, and  $R^2$  were used to determine the relative sensitivity of the independent variable (FDI Inflows) in affecting economic growth in Kenya. The analysis of variance and measures of correlation were also used to test the significance of the model.

## **CHAPTER FOUR**

### **DATA ANALYSIS, FINDINGS AND INTERPRETATION**

#### **4.1 Introduction**

This chapter presents data analysis, presentation and interpretation. The objective of the study was to determine the relationship between foreign direct investment and economic growth in Kenya. Data, based on the variables of the study, that is, economic growth in Kenya depicted by FDI, inflation rate, exchange rate and real interest rate, was collected from the Kenya National Bureau of Statistics (KNBS), Central Bank of Kenya, World Bank and UNCTAD databases from 1984 to 2014.

#### **4.2 Descriptive Statistics**

The Statistical Package for Social Sciences (SPSS) Version 20 computer package was used for data analysis. The raw data obtained from the World Bank's World Development Indicators and cross-checked with figures from the Kenya National Bureau of Statistics library on their Economic Surveys for the various years were entered into a data matrix with two dimensions. The number of years under consideration, 1984 – 2014, were entered in the columns and the number of variables entered into rows. The valid varied analyses, frequencies and correlations between the variables were then executed using the analyze option on the software to give an assortment of output which are presented in the subsequent subheadings below.

##### **4.2.1 GDP, FDI, Inflation rate, Interest rate and Foreign Exchange Rate**

Economic growth is an increase in the production and consumption of goods and services and entails increasing population and/or per capita consumption (Knack, 1995). The study findings



on GDP, FDI, Inflation rate, interest rate and Foreign Exchange rate are as presented in the Table 4.1 below:

**Table 4.1 GDP, FDI, Inflation Rate, Interest Rate and Foreign Exchange Rate**

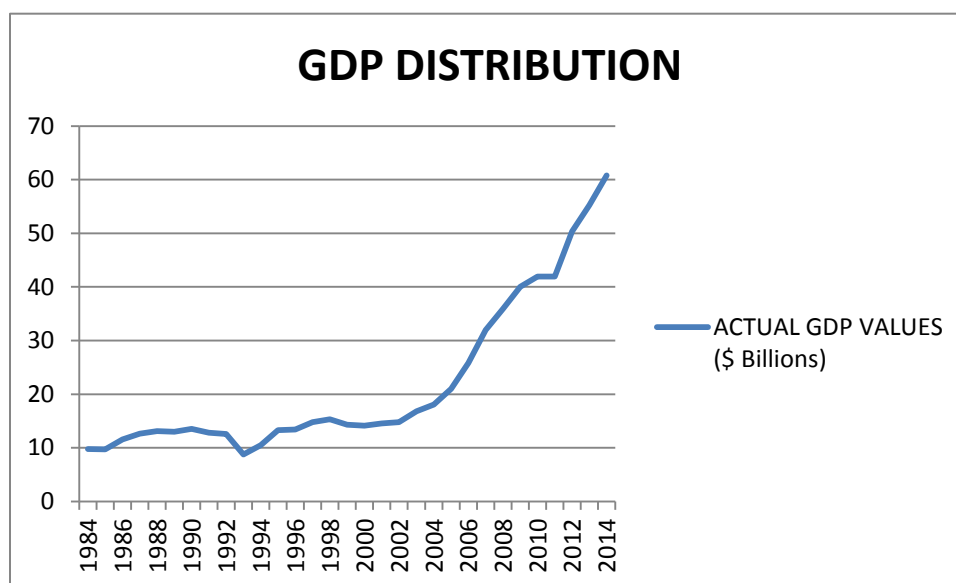
D e s c r i p t i v e   S t a t i s t i c s				
	Mean	Std. Deviation	Highest	Lowest
GDP \$ Billions	20.515847	3.4442192	60.77	8.76
FDI \$ Millions	83.389726	32.4710102	989	0.394431
Inflation %	12.31774194	2.9666065	45.98	1.55
Interest Rate %	17.22258	3.3857176	25.4	8.9
Forex Ksh/\$	43.578654	17.1854705	88.89	14.41

**Source: Research Findings**

#### 4.2.2 GDP Statistics from 1984-2014

The findings on absolute GDP values are as presented in the Table 4.1 and Figure 4.1 below.

**Figure 4.1 Gross Domestic Product (GDP) Distribution**



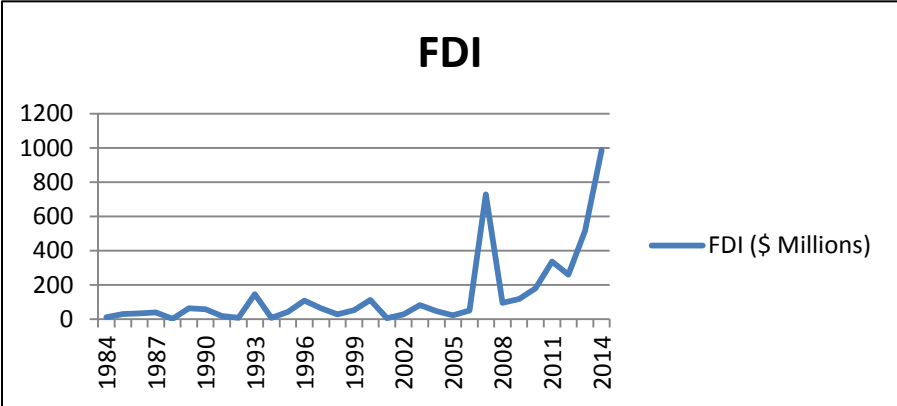
**Source: Research Findings**

The findings as shown in Table 4.1/Figure 4.1 indicates the trend of Gross Domestic Product (GDP) values over the 31 year period. The lowest value for GDP was US \$8.756 billion in year 1993 while the highest value for GDP was US \$60.77 billion in year 2014. This represented a positive change in the GDP values of US \$ 52.014 over the 31 year period. The steady rise in GDP values over the 31 year period indicates that the economic growth of Kenya has been on the rise over the last 31 years.

**4.2.3 FDI Statistics from 1984-2014**

The findings on FDI values are as presented in the Table 4.1 and Figure 4.2 below.

**Figure 4.2 Foreign Direct Investments (FDI)**



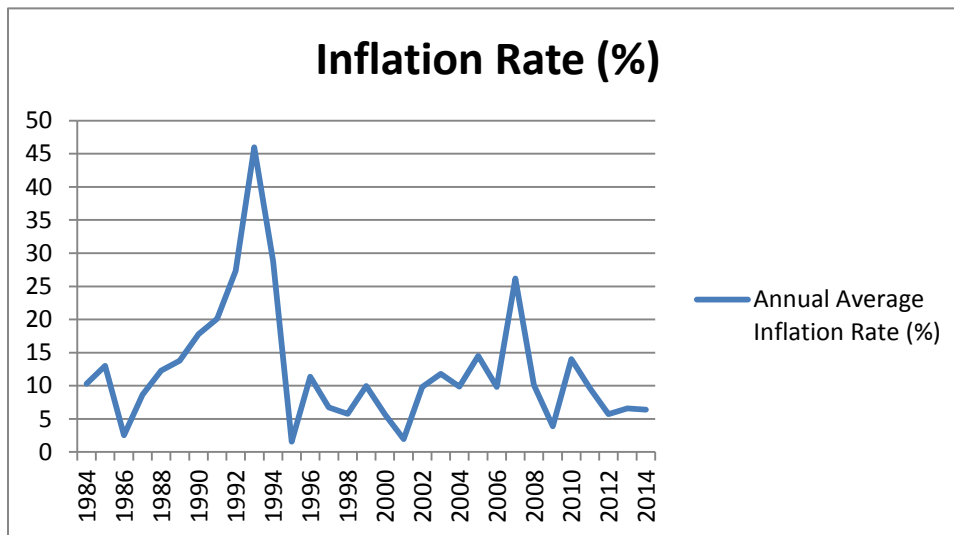
**Source: Research Findings**

The lowest value for FDI was US \$0.394431 million in year 1988 while the highest value for FDI was US \$989 million in year 2014. The findings indicate fluctuating FDI values with huge variations over the 31 year period. On the other hand, high scores of standard deviation indicate variation in the yearly FDI values of Kenya over the 31 year period. However, the findings indicate that there has been higher FDI values in the latter years [2007-2014] compared to the former years [1984-2006].

#### 4.2.4 Inflation Rate Statistics from 1984-2014

The findings on the inflation rate values are as presented in the Table 4.1 above and Figure 4.3 below.

**Figure 4.3 Inflation Rate**



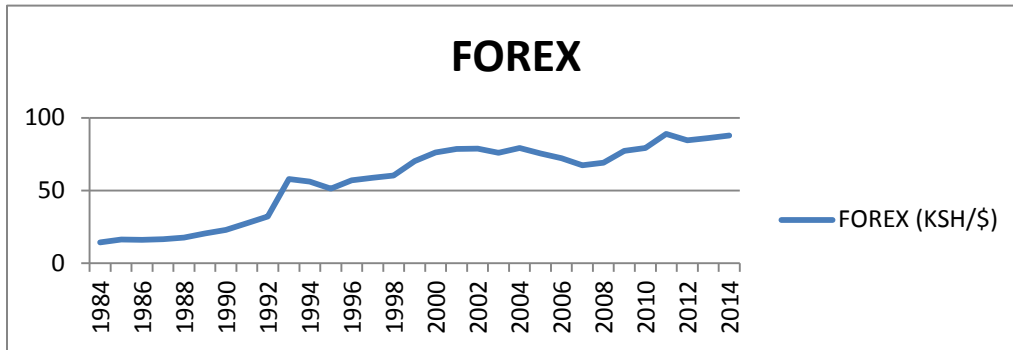
**Source: Research Findings**

The lowest inflation rate value was 1.55% in year 1996 while the highest inflation rate value was 45.98% in year 1993. The findings indicate rising and falling inflation rate values with significant annual variations over the 31 year period.

#### 4.2.5 Foreign Exchange Rate Statistics from 1984-2014

The findings on the exchange rate values are as presented in the Table 4.1 above and Figure 4.4 below.

**Figure 4.4 Foreign Exchange Rate**



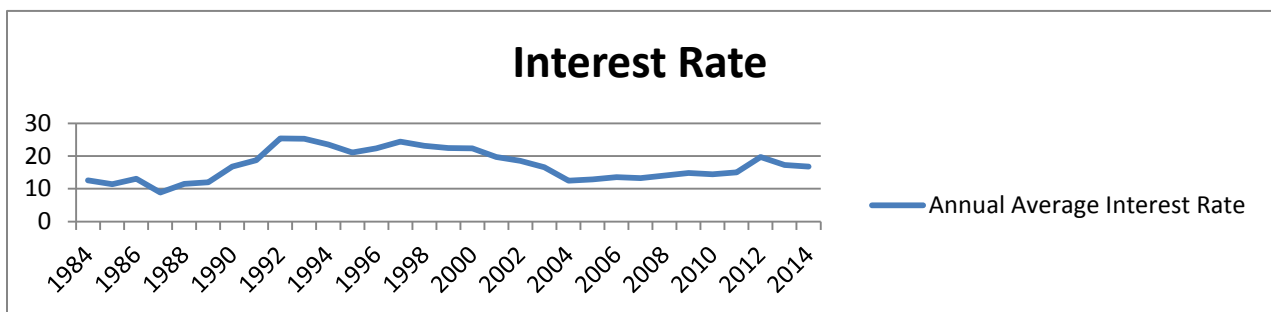
**Source: Research Findings**

The findings as shown in Table 4.1/Figure 4.4 above indicate the trend of foreign exchange rate values over the 31 year period of Kenya Shilling relative to the US Dollar. The lowest exchange rate value was 14.41 in year 1984 while the highest exchange rate value was 88.89 in year 2011. The findings indicate fluctuating levels of exchange rate values with significant annual variations over the 31 year period. However, the findings indicate that there was a general steady rise in Kenya's exchange rate values over the 31 year period.

#### **4.2.6 Interest Rate Statistics from 1984-2014**

The findings on the interest rate values are as presented in the Table 4.1 and Figure 4.5 below.

**Figure 4.5 Interest rate**



**Source: Research Findings**

The lowest interest rate value was 8.9% in year 1987 while the highest interest rate value was 25.4% in year 1992. The findings indicate fluctuating levels of interest rate values with slight annual variations over the 31 year period. The findings indicate that there was a general steady decrease in Kenya's interest rate values between 1994 and 2004 {24.4% to 12.5%}, followed by a steady increase from 2005 to 2012 {12.9% to 19.7%} before a slight decrease in 2013 and 2014 {17.3% and 16.8%, respectively}.

### 4.3 Inferential Statistics

This section seeks to explain the relationship between the variables described above.

#### 4.3.1 Correlation Analysis

Correlation analysis was used to describe the extent to which the variables are related. The relationship is as described in the Table 4.2 below.

**Table 4.2 Correlation Matrix**

		GDP \$ Billions	FDI \$ Millions	Inflation %	Interest Rate %	Forex Ksh/\$
Pearson Correlation	GDP \$ Billions	1.000	.208	.112	.465	.456
	FDI \$ Millions	.208	1.000	.191	.049	.086
	Inflation %	.112	.191	1.000	-.198	.195
	Interest Rate %	.465	.049	-.198	1.000	-.009
	Forex Ksh/\$	.456	.086	.195	-.009	1.000
Sig. (1-tailed)	GDP \$ Billions		.127	.271	.004	.004
	FDI \$ Millions	.127		.147	.395	.320
	Inflation %	.271	.147		.139	.143
	Interest Rate %	.004	.395	.139		.481
	Forex Ksh/\$	.004	.320	.143	.481	
N	GDP \$ Billions	31	31	31	31	31
	FDI \$ Millions	31	31	31	31	31
	Inflation %	31	31	31	31	31
	Interest Rate %	31	31	31	31	31
	Forex Ksh/\$	31	31	31	31	31

**Source: Research Findings**

Based on the correlation matrix on Table 4.2 above, FDI, inflation rate, interest rate and foreign exchange rate are positively related to GDP.

### 4.3.2 Regression Analysis

In determining the relationship between foreign direct investment and economic growth in Kenya, the study conducted a multiple regression analysis to determine the nature of relationship between the variables. The regression model specification was as follows;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon.$$

Where; Y= economic growth in Kenya = Gross Domestic Product  $X_1$  = FDI,  $X_2$  = inflation rate,  $X_3$  = exchange rate and  $X_4$  = interest rate  $\alpha$ =constant,  $\varepsilon$ = error term and  $\beta_1$ -  $\beta_4$  = coefficients of the independent variables. This section presents a discussion of the results of the multiple regression analysis. The study conducted a multiple regression analysis to determine the relationship between foreign direct investments and economic growth in Kenya. The study applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study. The findings are as presented in the following tables;

**Table 4.3 Model Summary**

M o d e l S u m m a r y <sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.677 <sup>a</sup>	.458	.378	2.7162978	.458	5.710	4	27	.002	1.259

a. Predictors: (Constant), Forex Ksh/\$, Interest Rate % , FDI \$ Millions, Inflation %

b. Dependent Variable: GDP \$ Billions

**Source: Research Findings**

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the changes in the independent variables or the percentage of variation in the

dependent variable (GDP) that is explained by all the four independent variables (FDI, inflation rate, exchange rate and interest rate). The four independent variables that were studied, explain 45.8% of variance in economic growth in Kenya as represented by the  $R^2$ . This means that other factors not studied in this research contribute 37.8% of variance in the dependent Model R Square Adjusted R Square Std. Therefore, further research should be conducted to investigate the other factors that affect the economic growth in Kenya.

**Table 4.4: Multiple Linear Regression Analysis**

C o e f f i c i e n t s <sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	10.365	2.522										
	FDI \$ Millions	.014	.015	.128	.883	.045	-.018	.045	.208	.168	.125	.953	1.049
	Inflation %	1.153	1.744	.099	.661	.514	-2.425	4.731	.112	.126	.094	.889	1.124
	Interest Rate %	.491	.148	.482	3.324	.003	.188	.794	.465	.539	.471	.952	1.050
	Forex Ksh/\$	.086	.029	.430	2.972	.006	.027	.146	.456	.497	.421	.959	1.043

**Source: Research Findings**

From the regression findings, the substitution of the equation ( $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ ) becomes:  $Y = 10.365 + 0.014 X_1 + 1.153 X_2 + 0.491 X_3 + 0.086 X_4 + \varepsilon$  Where Y is the dependent variable (GDP),  $X_1$  is the FDI,  $X_2$  is the inflation rate,  $X_3$  is the interest rate and  $X_4$  is the exchange rate.

**4.3.3 Analysis of Variance**

The Analysis of Variance was used to analyze the relationship between the variables in the model as shown in the Table 4.4 below.

**Table 4.5: ANOVA**

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	168.529	4	42.132	5.710	.002 <sup>b</sup>
Residual	199.213	27	7.378		
Total	367.742	31			

a. Dependent Variable: GDP \$ Billions

b. Predictors: (Constant), Forex Ksh/\$, Interest Rate % , FDI \$ Millions, Inflation %

**Source: Research Findings**

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and form a basis for tests of significance. The "F" column provides a statistic for testing the hypothesis against the null hypothesis that  $H_0 = 0$  (Weisberg, 2005). From the findings the significance value is .002 which is less than 0.05 thus the model is statistically significant in predicting how FDI, inflation rate, exchange rate and interest rate affect Kenya's GDP. The F critical at 5% level of significance was 5.71. Since F calculated (value = 5.71) is greater than the F critical (1.79), this shows that the overall model was significant.

Taking all the factors (FDI, inflation rate, exchange rate and interest rate) constant at zero, GDP will be 4.678. The data findings also show that a unit increase in FDI will lead to a 0.856 increase in GDP; a unit increase in inflation rate will lead to a 0.748 increase in GDP; a unit increase in exchange rate will lead to a 0.682 increase in GDP while a unit increase in interest rate will lead to a 0.453 increase in GDP. This means that the most significant factor is FDI followed by inflation rate. At 5% level of significance and 95% level of confidence, FDI had a 0.045 level of significance; inflation rate had a 0.099 level of significance; exchange rate had a 0.006 level of significance while interest rate had a 0.03 level of significance, implying that the most significant factor is FDI followed by inflation rate, exchange rate and interest rate, respectively.



#### **4.4 Interpretation of the Findings**

The objective of the study was to determine the relationship between foreign direct investment and economic growth in Kenya. The objective was assessed by use of secondary data and the subsequent analysis based on the variables of the study. The study findings revealed rising and falling FDI values with huge variations over the 31 year period with the lowest value for FDI being US \$0.394431 million in year 1988 and the highest value for FDI being US \$989 million in year 2014. However, the findings indicate that there has been higher FDI values in the latter years {2007-2014} compared to the former years {1994-2006}. Given that there have been higher FDI values in the latter years [2007-2014] compared to the former years {1994-2006} and the corresponding increase in Kenya's actual GDP values over the same period; there exists a positive relationship between FDI and the economic growth in Kenya. From the findings, the economic growth in Kenya increased over the 31 year period. The increase in the actual GDP values from US \$8.76 billion in year 1993 to US \$60.77 billion in year 2014 indicates a steady increase in Kenya's economic growth over the 31 year period. This was as a result of increased political stability over the period and improved technological skills. These findings are consistent with Republic of Kenya (2011) report which observed that the improved growth performance of the economy, particularly between 2003 and 2007, is a result of adoption of sound macroeconomic policies in the country.

This study explored the effect of foreign direct investment on the Kenyan economy using FDI and GDP data series from 1984-2014. The data was subjected to various inferential analyses such as the analysis of variance, to establish the relationship between variables. Based on the findings, empirical results reveal a positive and statistically significant relationship between FDI and GDP. Correlation analyses resulted in a correlation coefficient of 0.208 between FDI and

GDP using Pearson Correlation. Thus, it can be stated that the impact of foreign direct investment on economic growth in Kenya is a strong positive one. Correlation analyses between FDI and the other variables such as interest rate and foreign exchange rate also revealed a direct proportional relationship. On the other hand, an investigation on the relationship between FDI and inflation finds that it's a relatively weak one with a correlation coefficient of 0.112 being reported.

The analysis of variance revealed a standard error estimate of 2.7162978 which is relatively small due to the large data set over the 31 year period. At a 95% level of significance, the significant change was 0.02, which falls below 5% and shows that the study is significant. It goes ahead to also prove the hypothesis that FDI has a positive impact on economic growth (using the one-tailed T-test), as the t-statistic was 0.883 for FDI.

The findings are consistent with various empirical studies that support the theory that FDI has largely positive effects on economic growth. Findlay (1978), UNCTAD (1997), Borensztein (1998) and Ikiara (2002), acknowledge that FDI is the bridge to the technology and resource gap of underdeveloped countries by providing technological expertise, capital, management and marketing skills, facilitating access to foreign markets and generating both technological and efficiency spillovers to local firms provided the right policies and business conditions available. Consequently, large players in the international market are investing in SMEs through venture capitalism as well as franchising their companies locally, and thus breeding more foreign direct investment in Africa, and more so, in Kenya.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of the data findings on the relationship between foreign direct investment and economic growth in Kenya. The conclusions and recommendations are drawn there to. The chapter is therefore structured into summary of findings, conclusions, recommendations and areas for further research.

#### **5.2 Summary**

The study established that the economic growth in Kenya as represented by actual GDP values steadily increased by US \$51.810 billion over the 31 year period. The study revealed rising and falling FDI values with huge variations over the 31 year period with the lowest value for FDI being US \$5.3 million in year 2001 and the highest value for FDI being US \$729.0 million in year 2007. However, the findings indicate that there has been higher FDI values in the latter years [2007-2014] compared to the former years [1994-2006]. The study revealed rising and falling inflation rate values with significant annual variations over the 20 year period with the lowest inflation rate value being 1.97% in year 2002 and the highest inflation rate value being 26.20% in year 2008. The findings indicate that the annual average inflation rate values remained at single digits (and hence, low) for majority of the years in the period of study. The study revealed fluctuating levels of exchange rate values with significant annual variations over the 20 year period with the lowest exchange rate value being 67.32 in year 2007 and the highest exchange rate value being 88.81 in year 2011. However, the findings indicate that there was a

general steady rise in Kenya's exchange rate values over the 20 year period. The study revealed fluctuating levels of interest rate values with slight annual variations over the 20 year period. The findings indicate that there was a general steady decrease in Kenya's interest rate values between 1984 and 2004 [45.98% to 12.5%], followed by a steady increase from 2005 to 2012 [12.9% to 19.7%] before a slight decrease in 2013 and 2014 [17.3% and 16.8%, respectively].

### **5.3 Conclusion**

Given that there have been higher FDI values in the latter years [2007-2014] compared to the former years [1984-2006] and the corresponding increase in Kenya's actual GDP values over the same period, the study concludes that there exists a positive relationship between FDI and the economic growth in Kenya. Given that the annual average inflation rate values remained at single digits (and hence, low) for majority of the years in the period of study and the corresponding increase in Kenya's actual GDP values over the same period, the study concludes that there exists an inverse relationship between the levels of inflation rates and the economic growth in Kenya. Given the general steady increase in Kenya's exchange rate values over the 30 year period and the corresponding increase in Kenya's actual GDP values over the same period, the study concludes that there exists a positive relationship between the levels of exchange rate values and the FDI and consequently the economic growth in Kenya. Given the general steady decrease in Kenya's interest rate values between 1994 and 2004 and also between 2013 and 2014 and the corresponding increase in Kenya's actual GDP values over the same period, the study concludes that there exists an inverse relationship between the interest rate levels and the economic growth in Kenya. Based on the correlation analysis, FDI is positively related to GDP while Inflation and Exchange rate are negatively related to GDP. From regression analysis, the

most significant factor affecting economic growth is FDI followed by inflation rate, exchange rate and interest rate, respectively.

#### **5.4 Recommendations for Policy and Practice**

The study revealed that FDI positively influences the economic growth in Kenya. Therefore the study recommends that the government policy makers need to push reform agenda in the domestic market so as to attract more FDI in the Kenyan economy since a higher investor's confidence in domestic market acts as a stimulus in attracting FDI inflows. From the findings, the study established that there exists an inverse relationship between the levels of inflation rates and the economic growth in Kenya. Policies such as opening up of the economy by engaging in more bilateral and multilateral trade agreements, improving the quality of infrastructure by way of channeling more resources to its development especially in marginalized regions of the country. These policies may enhance the attraction of FDI thereby increasing economic growth.

Therefore the study recommends that the government should implement sound monetary and fiscal policies to achieve a stable macroeconomic environment. From the study findings there is a positive relationship between the levels of exchange rate values and the FDI and consequently the economic growth in Kenya. Therefore the study recommends that the government should ensure greater policy sensitivity towards the openness of the economy so that the traded commodities will be beneficial to the economy as a whole. In light of the study findings, there exists an inverse relationship between the interest rate levels and the economic growth in Kenya. Therefore the study recommends adoption of a low interest rate regime by the commercial banks and all financial institutions.

The role played by MNCs in foreign direct investment into the Kenyan market is key and the direct effects may be the fear by locally owned businesses of losing control over the markets and

industries to the expanding MNCs. To answer the question how national firms can survive and compete with MNCs, the government must revisit their policies concerning FDI and MNCs. In addition, due to the positive effects of FDI investment on the Kenyan economy, the government should continue to keep its open door policy to FDI and MNCs in the future. However, feasible measures should be taken to limit the disadvantages on domestic businesses. The foreign investment policy should be considered as a supplemental part of the domestic development policy. The opening to FDI and MNC investment should be carried out simultaneously. Special treatment should not be given to MNCs. Rather the local firms should be given the same treatment and the administrative constraints on the domestic state owned enterprises should be gradually eliminated.

### **5.5 Limitations of the Study**

The study was limited to a regression analysis of the effect of FDI on economic growth, and it can be argued that given the negative impact of FDI on economic growth, Kenya should ensure it remains an attractive spot for foreign investors. However more in depth analysis of the process in which small amounts of FDI inflows have succeeded in promoting growth would help in understanding the condition for effective FDI in Kenya and help in building effective investment promotion policies. In considering FDI it may be useful to look at the country's share of FDI in global flows. The data used in the study did not address this issue.

Obtaining data for the study was not easy owing to the fact that the Central Bank of Kenya (CBK) Statistical Bulletin and Financial review for the various years was only available for a few of the years under study. Further to this, the central bank website also seems to experience perennial problems that make it inaccessible but not is not in soft form so a lot of time was utilized going through heaps of publications.

The research study was conducted for a sample of 31 years and as such may not be an exact representation of the situation on the ground since a lot has been happening in Kenya during the duration under consideration such as the Structural Adjustment Programmes of the 1980s, adoption of multiparty politics in the early 1990s, the post-election violence of 2007/2208 as well as the global financial crisis of 2009.

This project was also conducted whilst in full time employment. While this has had the positive impact of having instilled in me a sense of discipline and responsibility, it has also meant higher levels of stress due to the inevitable need to put in extra hours to balance both tasks.

Some bias in research occurs when the researcher fails to take into account all of the possible variables. The findings of this study may also be subject to the researcher's bias. For instance, the results of the research might be subject to design and sampling bias whereby the process of sampling introduces an inherent bias into the study.

## **5.6 Suggestions for Further Research**

Since this study explored the relationship between foreign direct investments and economic growth in Kenya, the study recommends that similar study should be done in other countries for comparison purposes and to allow for generalization of findings on the relationship between foreign direct investments and economic growth. Further research could be done to investigate empirically the effects of FDI on capital accumulation, and the role played by export orientation strategies in allowing effective FDI inflows in Kenya.

Further research should be done on areas that attract more FDI into the country such as agriculture. Agriculture is the backbone of the Kenyan Economy. There are huge amounts of FDI channelled into the farming sector and foreign affiliates have established subsidiaries in the country. Studies should therefore be conducted on the feasibility of channelling FDI to the rather small scale agricultural industry so as to create increased production more exports, food security and alleviate poverty.

This study employed the use of macroeconomic variables such as GDP values to find out the effect of FDI on economic growth in Kenya. A study should be carried out using primary data by collecting investor responses about the effect of various institutional variables on their businesses. This would be done so as to give a comparison on the impact of FDI channelled through MNCs and their businesses that follow the local policies. Behavioral biases from the responses could also be used to gauge the impact of FDI on the Kenyan Economy from the view of local investors.



## REFERENCES

- Alfaro, L. & Charlton, A. (2009) Foreign Direct Investment and Financial Development. An Analysis of Complementarities and Channels and some possible extensions. *Journal of International Business Studies*, 19(1): 1-31
- Asiedu, E. (2003). *Foreign Direct Investment to Africa: The Role of Government Policy, Governance and Political Instability*. Mimeo: Department of Economics, University of Kansas.
- Asiedu, E. (2003). *Policy Reform and Foreign Direct Investment to Africa: Absolute Progress but Relative Decline*. Mimeo: University of Kansas, forthcoming in Development Policy Review.
- Bajona, C. & Kehoe T. J. (2006). *Trade, Growth, and Convergence in a Dynamic Heckscher Ohlin Model*. Federal Reserve Bank of Minneapolis Staff Report.
- Balasubramanyam, V.N., Salisu, M.A. & Sapsford, D. (1996). Foreign Direct Investment and Growth in EP and IS Countries, *Economic Journal* 106: 1996
- Barro, R.J. & Sala-i-Martin, X. (1997). Technological Diffusion, Convergence, and Growth, *Journal of Economic Growth* 2(1): 1-26.
- Borensztein, S. (1995). Foreign Direct Investment Behaviors of Multinational Corporations. *Journal of Finance*, 51, 279-324.
- Borensztein, E., Gregorio, J., & Lee, J. W. (1998). How Does Foreign Direct Investment affect Economic Growth? *Journal of International Economics*, 45:1. 115-135.
- Blomström, M. & Zejan, M. (1991). Why Do Multinational Firms Seek Out Joint Ventures? *Journal of International Development* 3: 53-63.
- Blomström, M., Globerman, S. & Kokko, A. (1999). *The Determinants of Host Country*

- Spillovers from Foreign Direct Investment: Review and Synthesis of the Literature.* The European Institute of Japanese Studies (EIJIS) Working Paper No. 76, Stockholm.
- Blomström, M. & Kokko, A. (1997). *How Foreign Investment Affects Host Countries.* Policy Research Working Paper WPS 1745, World Bank.
- Borensztein, E., Sahay, R. & Zettelmeyer, J. (1995). *The Evolution of Output in Transition Economies: Explaining the Difference.* IMF Working Paper WP/99/73.
- Borensztein, E., DeGregorio, J. & Lee, J.W. (1998). How does foreign investment affect Growth? *Journal of International Economics* 45.
- Buckley, P. J. (1985). A critical view of theories of the multinational enterprise, in P. J. Buckley & M. Casson (eds.), *The Economic Theory of Multinational Enterprise.*
- Castilla, L.M. (2005). *Reporte de Economía y Desarrollo 2004-05.*
- Caves, R. (1996), *Multinational Enterprise and Economic Analysis.* Cambridge University Press, Cambridge
- Colen, L., Maertens, M. & Swinnen, J. (2009). *Do Bilateral Investment Treaties attract FDI to developing countries? Working LICOS.* Centre for Institutions and Economic Performance, K.U.Leuven; Working Paper
- Cockcroft, L. & R. C Riddell (1991). *Foreign Direct Investment in Sub-Saharan Africa.* WPS 619 (Washington, D.C.: World Bank)
- De Mello, L., JR. & Fukasaku, K. (2000). Trade and Foreign Direct Investment in Latin America and Southeast Asia: Temporal Causality Analysis, *Journal of International Development*, 12: 903-924.
- De Mello, L.R., JR. (1997). Foreign Direct Investment in Developing Countries and Growth: A Selective Survey, *Journal of Development Studies.*

- Dunning, J. H. (1999). *Cross border M&As in development: some sundry thoughts*, draft. Economy, Working Papers on International Investment.
- Dunning, J. (1993). *Multinational Enterprises and the Global Economy*, Addison-Wesley, Wokingham. Credit Constraints. *Journal of International Economics* 61:73–100.
- Findlay, R. 1978. Relative Backwardness, Direct Foreign Investment and the Transfer of Technology: A Simple Dynamic Model. *Quarterly Journal of Economics* 92: 1-16.
- Greenwood, J., Jovanovic, B., 1990. Financial Development, Growth and the Distribution of Income, *Journal of Political Economy*, 98:5, Part 1: 1076--1107.
- Hanson, G. H. (2001). Should Countries Promote Foreign Direct Investment? *G-24 Discussion Paper 9*.
- Hanushek S., & Kimko N. (2000). Endogenous Innovation in the Theory of Growth: *Journal of Economic Perspectives*. 8.1 (1994): 23-44.
- Hermes, N., and Lensink R. (2002). *The Impact of Foreign Bank Entry on Domestic Banks in LDCs: An Econometric Analysis*, in: T. Kowalski, R. Lensink and V. Vensel (eds.), *Foreign Banks and Economic Transition*, Poznan, *Poznan University Press*.
- Hymer, S. (1976). *The International Operation of National Firms: A Study of Foreign Direct Investment*. Cambridge: MIT Press.
- Ikiara, M.M. (2003). *Foreign Direct Investment (FDI), Technology Transfer, and Poverty Alleviation: Africa's Hopes and Dilemma*. African Technology Policy Studies Network (ATPS) Special Paper Series No. 16, 2003, Nairobi, Kenya.
- Ikiara, M.M. (2002). *Impact of Foreign Direct Investment (FDI) on Technology Transfer in Africa: IMF Growth in sub-Saharan Africa: Performance, impediments and policy requirements*. World Economic Outlook, chapter VI. 1999, Washington, DC: IMF.

- Jones C.I (1995). Time Series Tests of Endogenous Growth Models. *Quarterly Journal of Economics* 110: 495-525
- Khaliq A., & Noy I., 2007. *Foreign Direct Investment and Economic Growth: Empirical Evidence from Sectoral Data in Indonesia*. University of Hawaii at Manoa, Department of Economics, Working Paper 200726.
- Kinaro, O.E. (2006). *Determinants of Foreign Direct Investment in Kenya*. Thesis, African Institute of Economic Development and Planning (IDEP), United Nations.
- Kindleberger C.P. (1969). *American Business Abroad*. The International Executive 11: 11-12
- Ngeny K.L & Mutuku C. *Impact of Foreign Direct Investment Volatility on Economic Growth in Kenya: EGARCH Analysis*. Economics.
- Knack, S., & Keefer, P. (1995). *Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures*. Economics and Politics, 7, 207-227.
- Lensink, R., & Morrissey O. (2001). *Foreign Direct Investment: Flows, Volatility and Growth in Developing Countries*, SOM research report 01E16, Groningen: SOM Research School, University of Groningen.
- Lipsey R (2002). *Home and Host Country Effects of FDI*, Lidingö, Sweden
- Lucas & Robert E.B. (1993). *On the Determinants of Direct Foreign Investment: Evidence from East and Southeast Asia*. World Development 21 (3): 391– 406.
- Mankiw, G. (2003). Macroeconomics 5th edition, Worth Publishes, USA. Measurement Systems, *Business Process Management Journal*, 11 ( 2): 109-122
- Miberg, W. (1996). The rhetoric of policy relevance in international economics, *Journal of Economic Methodology* 3 (2): 237–259

- Moore, K. and Lewis D. (1999). *Birth of the Multinational: 2000 years of ancient business history – from Ashur to Augustus*. Copenhagen Business School Press.
- Moosa I A., (2002), *Foreign Direct Investment: Theory, Evidence and Practice*, Palgrave Publishers.
- Ngugi W. & Nyangoro O. (2005). *Institutional Factors and Foreign Direct Investments Flows: Implications for Kenya*. Discussion Paper Series DP/48/2005, Published by the Kenya Institute for Public Policy Research and Analysis.
- Nyamwange, M. (2009). *Foreign direct investments in Kenya*. Unpublished MBA project.
- Obwona, M. & Egesa, K. (2004). *FDI Flows to Sub-Saharan Africa: Uganda country case study*. Economic Policy Research Centre(EPRC), Kampala, Uganda
- OECD (2000). *Main Determinants and Impacts of Foreign Direct Investment on China's Economy*. Working Papers on International Investment Number 2000/4
- Rebelo, S., 1991. Long run policy analysis and long run growth. *Journal of Political Economy* 99: 500 – 521
- Romer, Paul M. (1986). *Increasing Returns and Long-Run Growth*.
- Sacerdoti, G. (1997). Press, Bilateral Treaties and Multilateral Instruments. *Journal of International Economic Law*, 269: 261-287.
- Sindre R. (2011). *The Effects of Foreign Direct Investment on the Ugandan Economy*, University of Agder
- Smarzynska, B (2002). *Spillovers from Foreign Direct Investment through Backward Linkages. Does Technology Gap Matter?.* Mimeo, World Bank.
- Solow, R. (1956). A contribution to the theory of economic growth, *Quarterly Journal of Economics*, 50: 65-94.

- Tang S, Eliyathamby A., Selvanathan A. And Selvanathan S. (2012). *China's Economic Miracle. Does FDI Matter?*
- Yarbrough, B. V. & Yarbrough, R. M. (2002). *The World Economy: Trade and Finance*, South- Western College Publishers.
- OECD (2002). *Foreign Direct Investment for Development: Maximising Benefits, Minimising Costs*.
- UNCTAD (1998). *World Investment Report*. United Nations, New York.
- UNCTAD. *Economic Development in Africa: Rethinking the Role of Foreign Direct Investment*, United Nations Publication UNCTAD/GDS/AFRICA/2005/1, 2005.
- Vernon R. (1966). International investment and international trade in the product cycle. *Quarterly Journal of Economics* 80:190-207.

## APPENDICES

### APPENDIX 1: GDP RAW DATA

Year	Actual GDP Values (\$'billion')
1984	9.778
1985	9.731
1986	11.557
1987	12.67
1988	13.136
1989	13.023
1990	13.551
1991	12.797
1992	12.603
1993	8.756
1994	10.483
1995	13.289
1996	13.403
1997	14.777
1998	15.318
1999	14.333
2000	14.136
2001	14.536
2002	14.764
2003	16.796
2004	18.064
2005	21.001
2006	25.826
2007	31.958
2008	35.895
2009	40
2010	41.955
2011	41.955
2012	50.335
2013	55.241
2014	60.77

Source: World Bank Database

## APPENDIX 2: FDI RAW DATA

Year	FDI Values(\$ 'millions)
1984	10.75353
1985	28.84595
1986	32.72578
1987	39.38134
1988	0.394431
1989	62.18992
1990	57.0811
1991	18.83098
1992	6.363133
1993	145.6555
1994	7.432413
1995	42.28925
1996	108.6729
1997	62.09681
1998	26.54825
1999	51.95346
2000	110.9046
2001	5.302623
2002	27.61845
2003	81.73824
2004	46.06393
2005	21.21169
2006	50.67472
2007	729.0442
2008	95.58568
2009	116.2576
2010	178.0646
2011	335.2499
2012	258.6076
2013	514.3874
2014	989

Source: UNCTAD Database



### APPENDIX 3: ANNUAL INFLATION RATES RAW DATA

Year	Annual Average Inflation Rate Values (%)
1984	10.28
1985	13.01
1986	2.53
1987	8.64
1988	12.26
1989	13.79
1990	17.78
1991	20.08
1992	27.33
1993	45.98
1994	28.81
1995	1.55
1996	11.36
1997	6.72
1998	5.75
1999	9.96
2000	5.73
2001	1.97
2002	9.81
2003	11.79
2004	9.87
2005	14.5
2006	9.8
2007	26.2
2008	10.1
2009	3.88
2010	14
2011	9.65
2012	5.72
2013	6.6
2014	6.4

Source: World Bank Database

#### APPENDIX 4: ANNUAL INTEREST RATES RAW DATA

Year	Annual Average Interest Rates (%)
1984	12.6
1985	11.4
1986	13.1
1987	8.9
1988	11.5
1989	12
1990	16.8
1991	18.7
1992	25.4
1993	25.3
1994	23.5
1995	21.1
1996	22.3
1997	24.4
1998	23.1
1999	22.4
2000	22.3
2001	19.7
2002	18.5
2003	16.6
2004	12.5
2005	12.9
2006	13.6
2007	13.3
2008	14
2009	14.8
2010	14.4
2011	15
2012	19.7
2013	17.3
2014	16.8

Source: Kenya National Bureau of Statistics

## APPENDIX 5: ANNUAL FOREIGN EXCHANGE RATES RAW DATA

Year	Annual Average Exchange Rates (Kshs/1\$)
1984	14.41
1985	24.6
1986	24.3
1987	24.75
1988	26.55
1989	30.9
1990	34.35
1991	41.25
1992	48.3
1993	29
1994	65.54
1995	66.21
1996	66.89
1997	67.77
1998	67.81
1999	70.33
2000	76.18
2001	78.56
2002	78.75
2003	75.94
2004	79.17
2005	75.55
2006	72.1
2007	67.32
2008	69.18
2009	77.35
2010	79.23
2011	88.81
2012	84.53
2013	86.12
2014	88.22

Source: Kenya National Bureau of Statistics