

**THE RELATIONSHIP BETWEEN FOREIGN DIRECT INVESTMENTS (FDIs)  
AND ECONOMIC GROWTH IN KENYA**

**BY**

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Research project submitted in partial fulfillment of the requirement for the award of the degree of Master of Business Administration (MBA), School of Business, University of Nairobi.

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## DECLARATION

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



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Date

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This management research project has been submitted for examination with my approval as the university supervisor.

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Date

## **EPILOGUE**

When a piece of scholarly work can be read without effort, a lot of effort has gone in to its writing.

## **DEDICATION**

This research is dedicated to my dear wife Dorcas and my lovely daughter Michelle Malaika.

## **ACKNOWLEDGEMENT**

I would like to express my profound gratitude to my Lecturers, School of Business University of Nairobi, for their contribution in tackling my specific problems in the course of my entire study. In a more special way, I acknowledge my project supervisor, Kithinji Angela for her immense support given to me during my research. I equally owe gratitude to my wife Dorcas, my daughter Michelle Malaika and friends who willingly assisted me morally and with much love.

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## **ABSTRACT**

The role of foreign direct investments in promoting economic growth has been the subject of much debate among development specialists, researchers, aid donors as well as recipients in general and Kenya in particular. In spite of this, there are only few empirical studies that investigate the contributions of foreign direct investments to economic growth in Kenya. This study explores the relationship between foreign direct investments and economic growth in Kenya using data that spans from 2000 to 2009 and establishing through causal study if changes in one variable cause changes in the other. The results show that foreign direct investments significantly contribute to the current level of economic growth. The findings imply that Kenya could enhance its economic growth by effectively managing funds from aid and by strategically strengthening investment plans.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the study

For Kenya and other developing countries, attracting FDI has been a key aspect of its outward-oriented development strategy, as investment is considered a crucial element for output growth and employment generation (Kayonga, 2008). The last decade of the 20th century has seen major shifts in the size and composition of cross-border capital flows into developing countries. Net debt flows have become less and less important. Portfolio flows have become firmly established. Foreign direct investment (FDI) has come to swamp all other financial flows (World Development Report, 2000).

At the same time, following the collapse of communism in Eastern Europe and the former Soviet Union, official aid flows to developing countries have declined somewhat in absolute terms. In relative terms they have shrunk from roughly 56 percent of total net resource flows to about 16 per cent. Two key questions arise from these trends. First, how can shrinking aid flows be best used to support the goal of economic growth? Second, does foreign direct investment support sound development; in particular, does it contribute to economic development? (World Bank Global Development Finance, 2001)

According to Global Development Finance (2008) and Economic Survey (2008), Net Foreign Direct Investment (FDI) flows to developing countries rose from US\$ 367 billion in 2006 to US\$ 471 billion in 2007. This accounted for more than 25 percent of global FDI inflows. Of the net FDI flows to developing countries in 2007, Europe and Central Asia accounted for 34 percent, while Latin America and the Caribbean and East Asia and Pacific countries accounted for 23 percent and 25 percent, respectively.

South Asia, Middle East and North African countries collectively absorbed 12 percent of the net FDI flows to developing countries, while Sub-Saharan Africa absorbed 5 percent.

The top destination countries from these regions were China, Russia, Brazil, Mexico, Turkey and India. The largest recipient from Sub-Saharan Africa was South Africa (Global Development Finance, 2008).

Foreign direct investment (FDI) refers to long term participation by one country into another. FDI involves participation in investment, management, joint-venture, transfer of technology and expertise. There are two types of FDI: inward foreign direct investment and outward foreign direct investment, resulting in a *net FDI inflow* (positive or negative).

Foreign direct investment (FDI) is a measure of foreign ownership of productive assets, such as factories, mines and land. Increasing foreign investment can be used as one measure of growing economic globalization. Net inflows of foreign direct investment can be stated as a percentage of gross domestic product (GDP). The largest flows of foreign investment occur between the industrialized countries, but flows to non-industrialized countries such as Kenya are increasing sharply.

Foreign direct investment (FDI) provides a major source of capital which brings with it up-to-date technology contributing to economic growth. It would be difficult to generate this capital through domestic savings, and even if it were not, it would still be difficult to import the necessary technology from abroad, since the transfer of technology to firms with no previous experience of using it is difficult, risky, and expensive (Duce, Maitena, 2003).

Over a long period of time FDI creates many externalities in the form of benefits available to the whole economy which the host countries cannot appropriate as part of their own income.

These include transfers of general knowledge and of specific technologies in production and distribution, industrial upgrading, work experience for the labour force, the

introduction of modern management and accounting methods, the establishment of finance-related and trading networks, and the upgrading of telecommunications services. FDI in services affects the host country's competitiveness by raising the productivity of capital and enabling the host country to attract new capital on favourable terms. It also creates services that can be used as strategic inputs in the traditional export sector to expand the volume of trade and to upgrade production through product and process innovation. By altering a country's comparative advantages and improving its competitiveness through technology transfer and the effects of myriad externalities, foreign as well as domestic investment can alter a country's economic volume and pattern of trade in many income-enhancing directions (Ramirez, 2006).

There are several benefits of FDI over the economy of the receiving country. These benefits are discussed below.

Productive FDI usually leads to increased economic growth and brings 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. Companies within the country, due to the competition brought in by FDI, tend to become more productive to effectively counter the threat of the competitor from abroad. Higher productivity of companies contribute to the growth of a country's economy (Baracaldo (2005)). Employment generation is another positive effect of FDI. As a country becomes more productive, its competitiveness increases and with increases competitiveness, employment is created and the introduction to the world economy is more feasible (Castilla, 2005). Another benefit of FDI is that it allows for the transfer of technology and specialized knowledge which in turns favors and increases in productivity (Ramirez (2006)). FDI also may bring new goods and services, allowing the receiving country access to these with the benefit of the local consumers. Further, FDI becomes a way to fill the gap between the required funds for growth and the internal savings capacity of a country (Castilla, 2005).

Economic growth is a term used to indicate the increase of per capita gross domestic product (GDP) or other measure of aggregate income. It is often measured as the rate of change in GDP. Economic growth refers only to the quantity of goods and services produced (Encyclopaedia Britannica, 2008). According to this encyclopedia, Economic growth can be either positive or negative. Negative growth can be referred to by saying that the economy is *shrinking*. Negative growth is associated with economic recession and economic depression.

In order to compare per capita income across multiple countries, the statistics may be quoted in a single currency, based on either prevailing exchange rates or purchasing power parity. To compensate for changes in the value of money (inflation or deflation) the GDP or GNP is usually given in "real" or inflation adjusted terms rather than the actual money figure compiled in a given year, which is called the nominal or current figure (Henderson and Fund, 2007)

FDI has been shown to play an important role in promoting economic growth, raising a country's technological level, and creating new employment hence impacting on economic levels in developing countries (Blomstrom and Kokko, 2003; Klein, et al., 2003; Borenzstein, et al., 1998). It has also been shown that FDIs work as a means of integrating developing countries into the global market place and increasing the capital available for investment, thus leading to increased economic growth. (Rutihinda, 2007; Dollar and Kraay, 2000; Dupasquier and Osakwe, 2005).

Both developmental and agricultural economists view productivity growth in the agricultural sector as critical to economic growth (Rao, Coelli and Alauddin, 2004). FDI plays a role in increasing productivity by offsetting the investment and technological gap by significant levels of Total Factor Productivity (TFP) growth between sectors dominated by FDI and those dominated by domestic investment (Chen and Demurger, 2002; FAO, 2001; and Buckley, Clegg and Wang 2006) Much of this productivity is a result of technological improvement through spillover and improved efficiency (Blomstrom and Kokko, 2003).

The 2000 Millennium Development Goals (MDG) declaration of the United Nations outlines eight commitments to be reached by developing countries by 2015. The achievement of these goals will contribute to human development and economic development. One main source of these capital investments is Foreign Direct Investments (FDI), since in Kenya and most African countries, the private sector is perceived as an engine of growth in their National Development Strategies. Hence, FDI will play a critical and crucial role in the achievement of these goals or at least in economic growth. Moreover, with the widespread of the current financial and economic crisis, the reach of these MDG goals is even more jeopardized since most developed countries are putting in place economic and fiscal policies in order to keep capital at home. According to the World Bank's estimation, remittances were reduced by 8.3% in 2009 in Sub-Saharan Africa (World Bank, 2009). Such a drastic reduction may imply severe difficulties for many African countries.

In addition, with the uncertainty surrounding the recovery from the current crisis, several multinational companies are cancelling or postponing their investments in Kenya and other developing nations; about US\$ 70 billions of FDI were estimated to be cancelled in Africa in 2009 (17% of the US\$ 393 billion of total FDI stock). African countries, with their huge development gaps, need foreign investments to boost their economies in order to lift their populations out of poverty. Over last decades, FDI to Africa have increased on average in terms of both net inflows FDI per capita and ratio of FDI over total GDP, while at the same time real per capita GDP and the United Nations Development Programme (UNDP) computed Human Development Index (HDI) were improving (Sharma and Gani (2004)).

Therefore, at first glance, there seems to exist a link between FDI increase and economic improvement. Despite this apparent linkage, at closer look, it is questionable the type of FDI received and the conditions under which some African countries attract FDI. The literature on the causal relationship between FDI and economic growth is numerous, for example., Alfaro, 2003; Alfaro et al., 2004; Apergis et al.,2007; Carkovic and Levine,

2005; Chowdhury and Mavrotas, 2006 and Hansen and Rand, 2006 among many others. All these cited papers analyse the impact of FDI on economic growth measured by GDP growth. Therefore, the implicit assumption made in these papers for economic development is the use of GDP growth as a good proxy for welfare. Recently, this assumption has been questioned (Anand and Sen (2000)). Indeed, even if economic growth is required to improve population well-being, when this growth is not pro-poor, the effect may be a large inequality with a worsened economic status.

## **1.2 Statement of the Problem**

Foreign Direct Investment is investments to Kenya by governments of developed nations, international aid agencies and through multilateral institutions such as the World Bank, and by individuals through development charities such as Action Aid, Caritas, Care International or Oxfam, aimed at creating long-term sustainable economic growth. The past two decades have witnessed an era of economic crisis in the country, leading to a drastic drop in living standards. Although the country has witnessed a gradual increase in growth, the increase in economic growth is coinciding with skyrocketed prices of basic commodities (World Bank, 2004)

Studies carried out in Kenya have shown the level of FDI to Kenya to be low, both in absolute and relative terms. Arising from poor economic performance of past decades, Kenya has taken its place as the regional business leader amid these poor FDI inflows. It has retained regional advantages in FDI location, particularly as a result of its workforce and a central logistics position (FKE, 2002). Foreign investors in Kenya have tended to make relatively small investments but they are numerous and established across a wide variety of sectors. They have contributed significantly to some of the more dynamic sectors in the economy, including horticulture, and to export diversification (World Bank, 2004). These two studies by the World Bank and Federation of Kenya Employers do not show any absolute terms and relationship between FDI's and Kenya's GDP across the period.

Both the flow of foreign aid and FDI do influence Kenya's GDP growth rate with a small margin. This indicates that most of the foreign aid financial support is not fully used in development projects and this raises issues of corruption or misappropriation of funds (Lemi, 2005). Lemfs study also justifies why donor governments are becoming more intransigent on the usage of their assistance. However, his research was conducted in the final years of the 20<sup>th</sup> century and a lot of aspects have changed in the country including a change in government. Kurui (2008) found out that Chinese companies have made a contribution to the economy of Kenya but indicates that more research needs to be done

looking at a greater scope of foreign investors and picking bigger field of study. In similar studies, scholars have either looked at the determinants of FDI (Wanjala, 2001), impact of local private investment (King'ang'i, 2003) or researched on the greater regional implications without looking at the specific Kenyan economy (Kayonga, 2008 and Kurui, 2008).

This study analyzes the relationship between FDI and economic growth in Kenya. Several studies discussed in this Literature had ramped Kenya among sub Saharan Africa and a country specific study focusing on the current period was necessary.

Therefore, from these previous studies, the evaluation of the relationship between FDI and economic growth specific to Kenya is not addressed, including establishing the impact of either variable to the other with a specific focus on Kenya. This research therefore aims at addressing the relationship puzzle, thus answering the following research questions:

- (1) Does FDI contribute to economic growth in Kenya?
- (2) What is the Impact of FDI on economic growth in Kenya?

### **1.3 Objectives of the Study**

The general objective is to establish the relationship between foreign direct investment and economic growth in Kenya.

The specific objective is to establish the impact of foreign direct investment on economic growth in Kenya.

#### **1.4 Significance of the Study**

This study will be useful to various groups as discussed below.

Researchers and academicians who may be focusing on the current country orientated strategies, and innovation being ultimately destructive to the principles of sustainability or of other areas especially with regards to the method of gathering the information. Such data will hopefully be helpful for researchers in establishing their own means of conducting their study. As such, the notable significance of this study is the possibility that it may be able to use the findings for the other studies that may wish to analyze the factors for the success or demise of a particular study. The methods that this study will take must also be credible and help researchers in knowing how to look for particular information and know how to analyze them. It is through this that researchers will then be able to find out how they will be able to focus on their particular investigation and also know the possible methods that they may choose in the possible time that they may choose to already conduct their study.

The findings of this study will also raise international awareness to Bilateral and multilateral agencies and will make the donor community know the real situation in Kenya. This will make them follow the suggestions and examples of other donor nations who are already aware of the situation and have embarked on development projects, rather than donating fiscal cash assistance which often stand the risk of being swindled or embezzled into private bank accounts This will go a long way to drive Kenyans out of the doldrums and to improve on their living standards.

Further, the study is useful to policy makers in Kenya. Country competitiveness is not only improved by implementing economic policies that bring forward growth and stability, but also by promoting changes that will strengthen democracy, law & order, and a coherent institutional framework that is in synch with the dynamism of international trade, markets and practices (Montoya (2007)). By coherent policies and institutional framework, there are many instances in which governments have to work and redouble

their efforts. Areas such as political transparency, low corruption, applicability of legislation to business decisions and protection of rights, will create trust in the investor, increasing the chances of attracting FDI.

Finally, the regulator will find the study useful especially in regulating the transacting of securities, currencies and derivatives. From the Capital Markets Authority (CMA) point of view, several markets will need a global focus - stock exchange, money market, bonds, derivatives and foreign exchange. What is clear, though, is that countries have to provide policies that facilitate free capital movement. For an investor, the possibilities of equity capital and dividend repatriation are important when deciding on the appropriate jurisdiction to do the investment.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a review of the literature on FDIs and economic growth as presented by various researchers, scholars, analysts and authors. The chapter is organized as follows. Section 2.2 covers the theoretical literature review. Section 2.3 reviews empirical studies, both global and local studies while Section 2.4 is the conclusion.

#### **2.2 Theoretical Literature Review**

This section seeks to set out the theoretical framework that informs the process of analysis to be undertaken in this paper.

The story of development, almost everywhere, includes foreign direct investment. Early in the twentieth century, a large part of the world's infrastructure was developed through FDI, including for example, electric power in Brazil and telecommunications in Spain. British firms invested in consumer goods manufacturing abroad from an early date. Germany chemical companies were expanding outside Germany before World War 1, as was U.S auto manufacturing. Swedish, Swiss, French and Japanese firms had also established foreign subsidiaries. However, after World War 2, U.S firms became the main source of FDI, and manufacturing investment became most prevalent (IFC, 1997)

The theories upon which this study is based are discussed here as follows:

##### **2.2.1 Neoclassical Theory**

Early neoclassical theories explain international capital flows with differentiated rates of return across countries that lead to capital arbitrage, with capital seeking the highest return. Cockcroft and Riddell (1991) argue that the future investment flows are directly related to the package of incentives, which influence the expected rate of return; the

security of the investment; the scope and speed with which companies are able to disinvest. The tax regime; investment code or guidelines; and overall macroeconomic policies are all elements affecting FDI.

Despite these changes, there is still need for action for improvement of factors that inhibited investment. These factors include lack of formal legislation, lack of legal infrastructure such as patents, price controls, labour legislation, taxation policy and foreign exchange controls. Cockcroft and Riddell (1991) suggest that addressing these problems would certainly help improve the foreign investment climate.

According to Meier (1994), the major supply-side determinant of FDI in developing countries is the expectation of higher returns or higher profits by firms. Developed countries will tend to invest in poorer countries that have higher rate of return (Ekpo, 1996)

### **2.2.2 Industrial Organization and Internalization Theories**

These theories assume that foreign companies have oligopolistic power in the host countries (Cockcroft and Riddell, 1991; Meier, 1994). It holds micro and macro-economic factors responsible for the real life deviations from the perfect market model. According to this approach, firms choose an investment location because of its comparative advantage. Meier (1994) contributes to this theory by arguing that FDI may also be taken to gain control over inputs thus creating a barrier of entry to new competitors.

According to internalization theory, firms keep operations internal through a hundred percent subsidiary because they want to control the risk and retain control and market share. Multinationals engage in FDI to secure internalization advantages. Compared with external markets, the firm's linkages, integration, transfer pricing and economies of centralization allow costs to be reduced through FDI (Meier, 1994)

### **2.2.3 Keynesian Theory of Economics**

Development aid to least developed countries has its origin in the colonial period, although the issue of development was not important either to colonies or to the relationship between richer and poorer countries in 1950s (Riddell, 1992). This came as a result of Keynesian economics exemplified by, for instance, Rostow, Chenery, Strout and Rosentein-Rodan. Their concern was how to transform what is perceived as backward areas and unproductive societies into dynamic and growing economies (Riddell, 1992). Aid has been provided to accelerate developing economies, hence the role of outside capital is not directly to raise the standards of living but to make a transition in the economy and bring about sustainable growth (Bhagwadi and Eckaus, 1970). The economic motive was also in the self interest of the developed nations to invest in developing nations to raise their own welfare. If the rate of interest is higher than the productivity of capital in developed countries and lower in developing countries, both parties will gain. If there are under-utilised resources in developed countries, which could not be activated due to balance of payments constraints, international aid will be mutually profitable by channeling such resources to developing countries (Brandt Report, 1980)

### **2.2.4 Marginal Efficiency of Investment (MEI) and Accelerator Theories**

MEI is a measure of business demand for investment decision. Investment by a firm occurs when MEI (or the Internal Rate of return) on additional investment exceeds the rate of interest or cost of funds that are incurred in making investment decisions (Keynes, 1936). MEI could thus be defined as the rate of interest, which discounts the present value of investment to zero. The higher the market rate of interest, the lower the investment and vice versa.

The next phase of this evolution of investment theory gave rise to the accelerator theory, which makes investment a linear proportion of changes in input. The larger the gap between existing capital stock and the desired capital stock, the greater the firm's rate of investment. The decision to make incremental or decremental changes to the capital stock depends on the value the firm will attain (Tobin, 1969)

## **2.3 Empirical Literature Review**

### **2.3.1 Studies on Foreign Direct Investment**

Foreign Direct Investment (FDI) flows have increased substantially in the past two decades. These developments have motivated the appearance of a large number of empirical papers that test the expected benefits that FDI inflows are assumed to bring to the host countries. The recent theoretical and empirical literature observe that economic changes that are induced by increased FDI inflows, the aggregate economic effects, as well as the spillover effects of FDI in Kenya, has been a result of the reduction of barriers to FDI, considerable improvements in transportation and communication technologies, and the direct policy measures implemented by many governments to attract FDI (Hubert, F., and Nigel Pain. 2000). These developments have motivated the appearance of a large number of empirical papers that test the expected benefits that FDI inflows are assumed to bring to the host countries. Based on the result of these studies, it is also possible to assess the economic benefits of the governmental incentives to attract multinational enterprises (MNEs). Increased FDI inflows to a country can create several economic effects. Among others, FDI can affect labour and capital markets, trade patterns and economic growth. More importantly, economic changes may be induced by increased FDI and MNE presence in Kenya. Even when the amount of papers on this specific topic is sizeable and still growing, it is possible to classify most of the literature into relatively homogenous groups, which facilitates the overall analysis. Moreover, the recent use of micro-based panel data sets and of improved econometric techniques has dispelled most inconclusiveness and inconsistencies in the early literature. Using as a reference the latest group of studies, it is possible to draw some general conclusions about the economic spillover effects of inward FDI (Lejour et al., 2007). The researcher focuses on those studies that provide numerical evidence of the change in aggregated productivity resulting from increased MNE presence. These estimates will be used to assess the productivity spillovers when the share of foreign capital is increased in Kenya.

A large body of literature examining determinants of FDI begins with a partial equilibrium firm-level framework based in industrial organization and finance to motivate empirical analysis. These studies then typically examine how exogenous macroeconomic factors affect the firm's FDI decision, with the primary focus on exchange rate movements, taxes, and to a more limited extent, tariffs. Earlier studies often then use industry-level (or even country-level) data to explore these hypotheses, while more recent work has had firm- and plant-level data available to more appropriately match the firm-level theory.

Among the main determinants of foreign direct investments are the foreign exchange effects, taxes, institutions and trade protection. They have a great effect on FDI and the economy as discussed below.

The effect of exchange rates on FDI has been examined both with respect to changes in the bilateral level of the exchange rate between countries and in the volatility of exchange rates. In rough terms, while an appreciation of Kenya's currency would lower the cost of assets abroad, the (expected) nominal return goes down as well in the home currency, leaving the rate of return identical. Froot and Stein (1991) presents an imperfect capital markets story for why a currency appreciation may actually increase foreign investment by a firm. Imperfect capital markets mean that the internal cost of capital is lower than borrowing from external sources. Thus, an appreciation of the currency leads to increased firm wealth and provides the firm with greater low-cost funds to invest relative to the counterpart firms in the foreign country that experience the devaluation of their currency. Blonigen (1997) provides another way in which changes in the exchange rate level may affect inward FDI for a host country. If FDI by a firm is motivated by acquisition of assets that are transferable within a firm across many markets without a currency transaction (e.g., firm-specific assets, such as technology, managerial skills, etc.), then an exchange rate appreciation of the foreign currency will lower the price of the asset in that foreign currency, but will not necessarily lower the nominal returns.

In other words, a depreciation of a country's currency may very well allow a "fire sale" of such transferable assets to foreign firms operating in global markets versus domestic firms that may not have such access.

Other studies have generally found consistent evidence that short-run movements in exchange rates lead to increased inward FDI, including Grubert and Mutti (1991), Swenson (1994), and Kogut and Chang (1996), with limited evidence that the effect is larger for merger and acquisition FDI (see, e.g., Klein and Rosengren, 1994). Thus, the evidence has largely been consistent with the Froot and Stein (1991) and Blonigen (1997) hypotheses. These previous studies have also made the implicit assumption that exchange rate effects on FDI are symmetric and proportional to the size of the exchange rate movement. In summary, the literature has derived important and interesting firm-level models of how exchange rate uncertainty can affect FDI flows, depending on firm characteristics.

Interest in the effects of taxes on FDI has been considerable from both international and public economists. An obvious hypothesis is that higher taxes discourage FDI with the more important question being that of magnitude.

De Mooij and Ederveen (2003) provides an even more detailed discussion of the literature. However, some of the more well-placed articles in the literature have highlighted why such a number may be quite misleading. As these papers point out, the effects of taxes on FDI can vary substantially by type of taxes, measurement of FDI activity, and tax treatment in the host and parent countries. Another important issue is that a MNE potentially faces taxes in the host and the home countries. Countries have different ways of addressing this double taxation issue, which further complicates expected effects of taxes on FDI.

Most of the literature on taxation effects of FDI point to Hartman's papers (1984; 1985) as the starting point of the literature. These authors were the first to point out a way in which certain types of FDI may surprisingly not be very sensitive to taxes. The key insight by Hartman (1985) is that earnings by an affiliate in foreign country will ultimately be

subject to parent and host country taxes regardless of whether it is repatriated or reinvested in the foreign affiliate to generate further earnings. There is no way to ultimately avoid foreign taxes on these earnings. On the other hand, new investment decisions consider transfers of new capital from the parent to the affiliate that do not originate from the host country and, thus, have not yet incurred any foreign taxes. This has a number of important implications.

Slemrod's (1990) idea that policies to deal with double taxation may affect tax responsiveness did take hold in the literature. The common distinction is between territorial countries that do not tax any income outside of the parent country, exempting foreign-earned income from tax liability, and a worldwide tax method which considers all earned income by its parent firms potentially taxable, but may treat foreign income in a number of ways to avoid double taxation of the MNE. Two standard treatments to deal with this double taxation issue are for the home country to offer a credit or a deduction of foreign tax payment made by the MNE.

In summary, the literature has pointed out quite nicely that there is more than meets the eye initially when considering the effects of taxes on FDI. MNEs face tax rates at a variety of levels in both the host and parent country and policies to deal with double taxation can substantially alter the effects of these taxes on a MNEs incentive to invest.

The quality of institutions is an important determinant of FDI activity, particularly for less-developed countries for a variety of reasons. First, poor legal protection of assets increases the chance of expropriation of a firm's assets making investment less likely. Poor quality of institutions necessary for well-functioning markets (and/or corruption) increases the cost of doing business and, thus, should also diminish FDI activity. And finally, to the extent that poor institutions lead to poor infrastructure (i.e., public goods), expected profitability falls as does FDI into a market. While these basic hypotheses are non-controversial, estimating the magnitude of the effect of institutions on FDI is difficult because there are not any accurate measurements of institutions.

Most measures are some composite index of a country's political, legal and economic institutions, developed from survey responses from officials or businessmen familiar with the country (Wheeler and Mody, 1992).

The hypothesized link between FDI and trade protection is seen as fairly clear by most trade economists - higher trade protection should make firms more likely to substitute affiliate production for exports to avoid the costs of trade production. This is commonly termed tariff-jumping FDI. Perhaps because the theory is fairly simple and general, there have been few studies to specifically test this hypothesis. Another possible reason is data-driven. It is difficult to quantify non-tariff forms of protection in a consistent fashion across industries. Many firm-level studies have controlled for various trade protection programs using industry-level measures, but often with mixed results, including Grubert and Mutti (1991), Kogut and Chang (1996), and Blonigen (1997).

The importance of FDI in economic performance has been extensively discussed in the economic empirical literature (Blomstrom and Kokko, (2003) and Borenstein, De Gregorio, and Lee (1998)). These two studies using data on FDI received by developing countries tested the effect of FDI on economic growth in a cross-country regression framework. They found some indications that FDI has a positive effect on economic growth, but this impact was dependent on the human capital stock in the host economy. The increased productivity by FDI holds only when the host country has a minimum threshold stock of human capital. Similarly, Sun (1998) in Chen and Demurger's (2002) study also found evidence of a generally higher level of productivity growth of foreign-funded firms in China compared to domestic firms. These studies used data across different sectors, however, they are limited in that they focused on agricultural firms.

Analyses may be divided in two main categories: those looking at the trend and determinants of FDI and those looking at the impact of FDI on the domestic economy. The major determinants of FDI include domestic market size and its growth, domestic business environment, technological capability, trade policy, investment policy, commitment to international rules and agreements, and other factors.

The second group includes a growing number of empirical papers studying at various levels of aggregation, how FDI influences the economic growth process. The main focus of this paper is on the impact of FDI on economic growth in Kenya. The following review concentrates on the literature investigating the role of FDI in increasing productivity.

Within this body of literature, two different approaches can be distinguished. One aims at measuring the contribution of FDI to output growth and productivity. The other assesses the performance of sectors dominated by FDI compared with domestic firms, in order to appreciate their potential impact on industrial structure and efficiency. The contributions of FDI to the development of a country are widely recognized as filling the gap between desired investment and domestically mobilized saving, increasing tax revenues, and improving management and technology, as well as labor skills in host countries [Blomstrom and Kokko, (2003) and Borenzstein, De Gregorio, and Lee (1998)]. These could help the country to grow the domestic economy as well as fight its way out of poverty (Borenzstein, De Gregorio, and Lee. 1998). According to neoclassical theory, FDI influences income growth by increasing the amount of capital per person. It spurs long-run growth through such variables as research and development (R&D) and human capital. Through technology transfer to their affiliates and technological spillovers to unaffiliated firms in the host economy, MNCs can speed up the development of new intermediate product varieties, raise product quality, facilitate international collaboration on R&D, and introduce new forms of human capital (Ikara, 2003).

Empirical studies suggest that FDI is very important because it provides a source of capital and complements domestic private investment. Many studies (e.g., Blomstrom and Kokko, 2003; Chen and Demurger, 2002; and FAO, 2001), conclude that FDI contributes to total factor productivity and income growth in host economies, over and above what domestic investment would trigger. These studies find, further, that policies that promote indigenous technological capability, such as education, technical training, and R&D, increase the aggregate rate of technology transfer from FDI and that export

promoting trade regimes are also important prerequisites for positive FDI impact. For instance, a study by Borenstein, De Gregorio, and Lee (1998) using data on FDI received by developing countries tested the effect of FDI on economic growth in a cross-country regression framework. Similarly, Sun (1998) in Chen and Demurger.s (2002) study also found evidence of a generally higher level of productivity growth of foreign-funded firms in China compared to domestic firms. Most of these studies use data across different sectors, however, they are limited in that they focused on agricultural firms. It is assumed that the results and implications hold true also for agricultural firms.

### **2.3.2 The relationship between Economic Growth and Foreign Direct Investment**

In recent years, economists have developed new models of endogenous economic growth that consider policy influences on growth and divergent outcomes among countries (Bhaduri, 2006). These models deal with such issues as growth, the operation of financial markets, trade policy, government expenditures, and taxation. Using the standard neoclassical growth model as a point of departure, recent developments in growth theory can be reviewed. One reason for the success of the standard neoclassical growth model is that it provided a convenient tool for organizing data on the sources of economic growth. The model left much of the growth unexplained, however. Cross-sectional analysis has provided some useful insights into the growth process. This entails analysing different sectors of the economy from Agriculture to Manufacturing and to services industry; which helps in achieving representative results on the economic growth and its relationship with FDI. Economists working in this area should target their work directly to the analysis of policy options in developing countries. More work is also necessary at the sectoral level. The new models of growth have not adequately described the issues of structural transformation and disequilibrium in factor markets. Policymaking generally will benefit from empirical results generated from more carefully constructed structural economic models (Trevor Swan, 2008).

According to Fisher and Clark, the role of Economic growth is the increase in the real GDP per capita over a period of time. It can be shown by an outward shift of the production possibility curve. The production possibility curve shows the combination of two goods that a country can produce using all of its resources in the most efficient way. Economic growth will increase the amount of goods and services that a country can potentially produce. To do this, the quantity or quality of factors of production must be increased. Fisher and Clark (1949) argued that development is a broader process that includes raising living standards and poverty reduction.

Supply side economics argued that economic growth would eventually lead to a general improvement of peoples' living standards as trickle down occurs. Trickle down as its name suggests is the process whereby part of the population experiencing an increase in their income spends money on the domestic economy thus setting in motion multiplier effect, which generates income for the poorer sections of the population (Robert Mundell, Arthur Laffer and Reaganomics, 1981).

Does inflow of FDI in Kenya have any impact on the economic growth? This is expected to be the case especially for smallholder farmers who are linked through integrated producer schemes. However, there is growing empirical evidence suggesting that the impact of FDI on economic growth is not automatic. For example, Borenzstein, De Gregorio, and Lee (1998) show that for FDI to contribute to economic growth, the host country must have achieved a minimum threshold level of development in education, technology, infrastructure, financial markets, and health. Thus FDI contributes to economic growth only when the host country has reached a developmental level capable of absorbing the advanced technology that it brings. This suggests that most of the effect of FDI on economic growth likely derives from efficiency gains rather than an overall higher induced level of investment. In a similar perspective, Fan (1999) quoted in Chen and Demurger (2002), shows that positive and significant spill-over appears only in industries which are mainly labor-intensive and have a low to moderate technology gap between Chinese and foreign firms. What is interesting here, however, is that such rapid

labour productivity growth alone is unlikely to have a sizeable effect on the China price precisely because labour costs are so low, e.g., an 8.5% rise in productivity would lower the China price by less than half a cent on the manufacturing dollar in any given year. FDI is thought to contribute to economic development through initial macroeconomic stimulus and by raising total factor productivity and efficiency of resource use in the recipient economy. Ikara (2003) shows that, FDI contributes to production by raising total factor productivity and efficiency of resource use, which leads to economic growth. He found out that the transmission mechanism between FDI and economic growth is through direct technology transfer, technological spillover, human capital formulation, international trade integration, and competitive business environment. However, his study was more on poverty reduction rather than economic growth which may pose as a limitation although the two might be closely related.

One constraint of the literature is the definition of economic development the main candidate for measurement is the GDP per capita. This is widespread and available for each country on an annual basis, but measures only one dimension of development.

Unfortunately, Kenya has relative small market size. To overcome this market size limitation, most multilateral and bilateral development agencies promote regional integration in Kenya to attract more FDI in order to improve growth. For instance, in its 2004 report on Assessing Regional Integration in Africa, and the subsequent ones, the United Nations Economic Commission for Africa (UNECA, 2004) underscores the need to accelerate links between national economies: "African countries are taking concrete steps towards integrating their economies — building regional communities, adopting common currencies and increasing trade with each other — and laying the groundwork for the establishment of an African Economic Community which, like the European Union, could enable them to benefit from larger markets."

### **2.3.3 Empirical Review of Local Specific Studies**

Recent studies on foreign investment in East Africa paint a gloomy picture for Kenya, compared to Tanzania and Uganda. A study by the Federation of Kenya Employers (FKE) (2002) indicates that Kenya began to lose out to its two neighbors from around 1991. The FKE study indicates that FDI investment to Kenya dropped from \$79m in 1980 to \$57m in 1990. Foreign direct investment in Kenya dropped further in 1991 to just \$19m, then to \$6m in 1992 and a further drop to \$2m in the following year. The situation, according to FKE's figures, became worse as time went on. Kenya only received \$4m FDI in 1994, similarly, while Kenya's foreign investment was worth only \$42m in 1999, it was relatively low compared to other East African countries. In the last 8 years, Kenya has seen major shifts in the size and composition of cross-border capital flows into the economy. Net debt flows have become less and less important. Portfolio flows have not become firmly established. Foreign direct investment (FDI) has come to swamp all other financial flows and has faced a lot of shifts and instability.

Both the flow of foreign aid and FDI do influence Kenya's GDP growth rate with a small margin. This indicates that most of the foreign aid financial support is not fully used in development projects and this raises issues of corruption or misappropriation of funds. It also justifies why donor governments are becoming more intransigent on the usage of their assistance. The low levels of FDI presence may be linked to declining levels of ODA, this is because FDI's are mostly from donor countries and wouldn't like to be viewed negatively if their governments are not contributing financial support and they may lose the risk of being awarded contracts. For example, in Iraq today, companies whose governments did not participate directly during the war in Iraq could not be awarded any contracts during the ongoing reconstruction process.

Net interest for servicing loans borrowed affects the economy positively, however, if the government is to pay those interests on the loans it will have a negative influence on the growth process. (Lemi, 2005)

New trends have reinforced the importance of private investment for many developing countries (Kingangi, 2003). As a result of the move towards neo-liberal policies, the role of the Kenyan government has shifted from an active economic player with productive activities to a provider of an environment of doing business and the social risk insurance. Private investment, both domestic and foreign, is viewed as the driving force of the Kenyan economy (Kingangi, 2003). However, he noted that recent work also points to the following potential risks: it can be reversed through financial transactions; it can be excessive owing to adverse selection and fire sales; its benefits can be limited by leverage; and a high share of FDI in a country's total capital inflows may reflect its institutions' weakness rather than their strength. It implies that policy recommendations for Kenya should focus on improving the investment climate for all kinds of capital, domestic as well as foreign. Issues affecting FDI are taxation, investment incentives, laws on privatization, legal reforms, land law, the strength of the judiciary and the state of corruption, bureaucracy and cross border issues in the two countries.

The main factors influencing investment decisions in third world countries include political risk, economic freedom, business freedom, fiscal incentives, trade freedom, government expenditure, inflation, corruption, property rights, state of financial system and labour regulations (Kayonga, 2008). His study points out that policy framework of a country is the most important aspect - these are rules and regulations governing the country and operations of foreign investors. Africa was found to be unstable because of war, military interventions in politics, religious and ethnic conflicts. Further, the liberalization of national FDI frameworks in developing economies has been substantially successful in attracting FDIs in those countries. Nevertheless the benefits thereof are debatable. According to a 2007 index of economic freedom assessment, economies that are more open have a better investment environment than liberalized economies.

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## **2.4 Conclusion of Literature Review**

We have looked extensively at various global studies and the focus on the relationship between FDI and economic growth continues to grow. However, our focus will narrow down to the Kenyan economy and in the following part we find the relevance of local studies conducted so far.

From the literature review, it was indicative that there exist a relationship between FDI and Economic growth in the general studies focusing on Sub-Saharan Africa, East African countries and through the various determinants of FDI.

Studies carried out in Kenya have shown the level of FDI to Kenya to be low, both in absolute and relative terms. Arising from poor economic performance of past decades, Kenya has taken its place as the regional business leader amid these poor FDI inflows. It has retained regional advantages in FDI location, particularly as a result of its workforce and a central logistics position (FKE, 2002). Foreign investors in Kenya have tended to make relatively small investments but they are numerous and established across a wide variety of sectors. They have contributed significantly to some of the more dynamic sectors in the economy, including horticulture, and to export diversification (World Bank, 2004). These two studies by the World Bank and Federation of Kenya Employers do not show any absolute terms and relationship between FDIs and Kenya's GDP across the period.

Both the flow of foreign aid and FDI do influence Kenya's GDP growth rate with a small margin. This indicates that most of the foreign aid financial support is not fully used in development projects and this raises issues of corruption or misappropriation of funds (Lemi, 2005). Lemi's study also justifies why donor governments are becoming more intransigent on the usage of their assistance. However, his research was conducted in the final years of the 20<sup>th</sup> century and a lot of aspects have changed in the country including a change in government. Kurui, 2008 found out that Chinese companies have made a contribution to the economy of Kenya but indicates that more research needs to be done

looking at a greater scope of foreign investors and picking bigger field of study. In similar studies, scholars have either looked at the determinants of FDI (Wanjala, 2001), impact of local private investment (King'ang'i, 2003) or researched on the greater regional implications without looking at the specific Kenyan economy (Kayonga, 2008 and Kurui, 2008).

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter provides the techniques, methods and procedures to be adopted in conducting the research. The chapter is organized as follows: Section 3.2 outlines the research design. Section 3.3 discusses the population of study. Section 3.4 covers data collection. Section 3.5 provides the data analysis techniques to be used.

#### 3.2 Research Design

The research design adopted is a Causal study, focusing on how FDI causes changes in Economic growth as well as how economic growth causes changes in FDI in Kenya. This is because both FDI and economic growth are variables producing effects on each other and the data for analysis is not too large and therefore does not require statistical econometric methods. Yearly GDP and FDI values over the period 2000-2009 shall be used as a sufficient measure of economic growth and foreign aid. The research will then analyse data to estimate the result of the correlation ( $r$ ) between the variables.

#### 3.3 Population

The target population for this study shall be all sectors of the Kenyan economy for data relating to economic growth. The figures to be used are the GDP values which are a measure of economic growth comprising of all sectors of the economy. While for FDI, Official Development Assistance (ODA) figures for net disbursements to Kenya from all donors shall be used for each year in focus.

### **3.4 Sample**

This shall be a sample of ten (10) most recent years. Data for annual GDP and ODA figures in millions of United States dollars shall be obtained for the year 2000 to year 2009.

### **3.5 Data Collection**

Secondary data will be used in the study. This data will be obtained from Government of Kenya publications such as the Annual Budget and Financial estimates, Central Bank of Kenya Annual report, Kenya Economic Survey by the Ministry of Planning. Data obtained from Government of Kenya publications is considered authentic and can therefore be relied upon for deriving conclusions. Such data is also considered credible and free from error or any bias.

Both GDP and ODA values will be captured for the last 10 years, from 2000 to 2009. The Human Development Index (HDI) will be used to measure welfare or the level of economic growth and development. The (HDI) is a normalized measure of life expectancy, literacy, education, standard of living, and GDP per capita for countries worldwide. It is a standard means of measuring well-being. It is used to determine and indicate whether a country is a developed, developing, or underdeveloped country.

### **3.6 Data Analysis**

Descriptive and inferential analyses will be used to analyse the data, all in an effort to investigate the relationship between foreign direct investment and economic growth in Kenya.

The variables for data collection are Official Development Assistance (ODA) net flows to Kenya, yearly, over a ten-year period from 2000 to 2009, GDP per capita values US purchasing power parity (\$PPP) over the same period. A correlation shall be done to see the degree of the relationship between the variables.

The research shall use the Statistical Package for the Social Sciences (SPSS) to estimate the result of the correlation between the variables.

Bivariate correlation and regression analysis will be used to evaluate the degree of relationship between the FDI and Economic growth. Using Pearson Correlation (r), the most commonly used bivariate correlation technique, the association between these two quantitative variables will be estimated. Bivariate regression will be used to analyse the relationship between the independent and dependent variable to predict the score of the dependent variable from the independent variable.

The research model to be estimated is general multiple regression model:

$$Y = f(K, L, T, I) \quad 1$$

$$Y = f(K, INF, RER, TOT, RIR) \quad ,2$$

Where Y = Output (in this case Gross Domestic Product)

K = Capital (in this case Foreign Direct Investment)

INF = Inflation rate

RER = Real exchange rate

TOT = Terms of trade (as percentage of GDP)

RIR = Real interest rate

Assuming a Cob-Douglas production function of the form

$$Y = AK^p RER^p i \quad TOT^r \quad RIR^m \quad INF^M \quad 3$$

Where Y = Gross Domestic Product

K = Foreign Direct Investment

INF = Inflation rate

RER = Real exchange rate

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The research model to be estimated is general multiple regression model:

$$Y = f(K, L, T, p) \quad 1$$

$$Y = f(K, INF, RER, TOT, RIR) \quad 2$$

Where Y = Output (in this case Gross Domestic Product)

K = Capital (in this case Foreign Direct Investment)

INF = Inflation rate

RER = Real exchange rate

TOT = Terms of trade (as percentage of GDP)

RIR = Real interest rate

Assuming a Cob-Douglas production function of the form

$$Y = AK^p RER^p i \quad TOT^m \quad RIR^m \quad INF^m \quad 3$$

Where Y = Gross Domestic Product

K = Foreign Direct Investment

INF = Inflation rate

RER = Real exchange rate

TOT = Terms of trade (as percentage of GDP)

RIR = Real interest rate

The research shall use the Statistical Package for the Social Sciences (SPSS) to estimate the result of the correlation between the variables.

Bivariate correlation and regression analysis will be used to evaluate the degree of relationship between the FDI and Economic growth. Using Pearson Correlation (r), the most commonly used bivariate correlation technique, the association between these two quantitative variables will be estimated. Bivariate regression will be used to analyse the relationship between the independent and dependent variable to predict the score of the dependent variable from the independent variable.

The research model to be estimated is general multiple regression model:

$$Y = f(K, L, T, \dots, rt) \dots \dots \dots 1$$

$$Y = f(K, INF, RER, TOT, RIR) \dots \dots \dots 2$$

Where Y = Output (in this case Gross Domestic Product)

K = Capital (in this case Foreign Direct Investment)

INF = Inflation rate

RER = Real exchange rate

TOT = Terms of trade (as percentage of GDP)

RIR = Real interest rate

Assuming a Cob-Douglas production function of the form

$$Y = A K^p RER^{P1} TOT^{P2} RIR^{P3} INF^{P4}$$

Where Y = Gross Domestic Product

K = Foreign Direct Investment

INF = Inflation rate

RER = Real exchange rate

TOT = Terms of trade (as percentage of GDP)

RIR = Real interest rate

The interest of this study is to establish the relationship between Y (Gross Domestic Product in Kenya) and K (Foreign Direct Investment in Kenya, which is a component of Official Development Assistance). Therefore, the model maybe restated as follows.

$$Y = f(K, INF, RER, TOT, RIR) \dots \dots \dots 4$$

$$Y = f(aK_t^{a1} INF_t^{a2} RER_t^{a3} TOT_t^{a4} RIR_t^{a5}) \dots \dots \dots 5$$

Where Y = Gross Domestic Product

K = Foreign Direct Investment

INF = Inflation rate

RER = Real exchange rate

TOT = Terms of trade (as percentage of GDP)

RIR = Real interest rate

Therefore the general multiple regression model:

$$\ln Y_t = a + a_1 \ln K_t + a_2 \ln INF_t + a_3 \ln RER_t + a_4 \ln TOT_t + a_5 \ln RIR_t + \epsilon \dots \dots \dots 6$$

Where  $\ln Y$  = Natural logarithm for Gross Domestic Product

$\ln K$  = Natural logarithm for Foreign Direct Investment

$\ln INF$  = Natural logarithm for Inflation rate

$\ln RER$  = Natural logarithm for Real exchange rate

$\ln TOT$  = Natural logarithm for Terms of trade (as percentage of GDP)

$\ln RIR$  = Natural logarithm for Real interest rate

a is a constant

The hypotheses for this study will be:

**H<sub>al</sub>:** There is a significant relationship between foreign direct investments (FDI) and economic growth (GDP) in Kenya.

**H<sub>oi</sub>:** There is no significant relationship between foreign direct investments (FDI) and economic growth (GDP) in Kenya.

The interest of this study is to establish the relationship between Y (Gross Domestic Product in Kenya) and K (Foreign Direct Investment in Kenya, which is a component of Official Development Assistance). Therefore, the model maybe restated as follows.

$$Y = f(K, INF, RER, TOT, RIR) \dots \dots \dots 4$$

$$Y = f(aK_t^{a1} INF_t^{a2} RER_t^{a3} TOT_t^{a4} RIR_t^{a5}) \dots \dots \dots 5$$

Where Y = Gross Domestic Product

- K = Foreign Direct Investment
- INF = Inflation rate
- RER = Real exchange rate
- TOT = Terms of trade (as percentage of GDP)
- RIR = Real interest rate

Therefore the general multiple regression model:

$$\ln Y_t = a + a_1 \ln K_t + a_2 \ln INF_t + a_3 \ln RER_t + a_4 \ln TOT_t + a_5 \ln RIR_t + E \dots \dots \dots 6$$

Where lnY = Natural logarithm for Gross Domestic Product

- lnK = Natural logarithm for Foreign Direct Investment
- lnINF = Natural logarithm for Inflation rate
- lnRER = Natural logarithm for Real exchange rate
- lnTOT = Natural logarithm for Terms of trade (as percentage of GDP)
- lnRIR = Natural logarithm for Real interest rate
- a is a constant

The hypotheses for this study will be:

- H<sub>al</sub>:** There is a significant relationship between foreign direct investments (FDI) and economic growth (GDP) in Kenya.
- H<sub>oi</sub>:** There is no significant relationship between foreign direct investments (FDI) and economic growth (GDP) in Kenya.

## CHAPTER FOUR

### PRESENTATION OF FINDINGS AND INTERPRETATIONS

#### 4.1 Introduction

This chapter presents the data that was collected from all secondary sources using tables. Descriptive, causal and inferential analyses are used to analyse the data, all in an effort to investigate the relationship between foreign direct investment and economic growth in Kenya.

#### 4.2 Descriptive Analyses

**Table 4.2.1: Foreign Direct Investments, net inflows to Kenya from all donors and investors from 2000 to 2009**

YEAR	Amount in current prices (Millions of US Dollars)
2000	509
2001	466
2002	396
2003	522
2004	658
2005	752
2006	943
2007	1,323
2008	1,360
2009	1,400

*Source: Central Bank of Kenya, Annual Report (2009)*

Table 4.2.1 Shows that the amount of FDI to Kenya from all foreign investors in 2000 was \$509 million, it reduced from \$509 in 2000 to \$396 in 2002. The flow of FDI increased in 2003 to \$522 million, and continued through 2004, 2005, witnessing a steady increment till 2009. The highest amount of FDI received within the study period was in 2009, amounting to \$1,400 million.

**Table 4.2.2: *The Gross Domestic Product (GDP) figures of Kenya from 2000 to 2009***

<b>YEAR</b>	Amount in current prices (millions of US\$)
2000	12,690
2001	12,990
2002	13,150
2003	14,900
2004	16,100
2005	18,740
2006	22,500
2007	27,120
2008	30,350
2009	30,200

*Source: Kenya National Bureau of Statistics, Facts and Figures (2009)*

The above data shows that the GDP figures of Kenya from 2000 to 2002 were increasing by very small percentages. The GDP value stood at \$12.69 billion in 2000 and experienced an increase of about 2% in 2001 and 2002, and witnessed a greater growth of about 13% in 2003. From 2004 to 2008; the GDP experienced a gradual increase at an average of \$3 billion annually with a slight drop in 2009.

**Table 4.2.3: Shorn the FDI and GDP figures for Kenya from 2000 to 2009 at current prices in millions of US\$**

<b>YEAR</b>	<b>FDI Figures (Millions of US\$)</b>	<b>GDP Figures (millions of US\$)</b>
2000	509	12,690
2001	466	12,990
2002	396	13,150
2003	522	14,900
2004	658	16,100
2005	752	18,740
2006	943	22,500
2007	1,323	27,120
2008	1,360	30,350
2009	1,400	30,200

*Source: Established from table 4.2.1 and table 4.2.2*

This table shows the combined figures of FDI and GDP at current prices; both figures are in millions of US dollars.

### **4.3 Inferential Analyses and Normality Test**

Inferential analyses are used to make inferences from the data to more general conditions; while descriptive statistics is used to simply describe what's going on in the data.

Normality test is done to ensure the variables used in the analysis are normally distributed. The common test for normality is the Jarque-Bera statistics test (Jarque, 1980). This test utilizes the mean based coefficient of skewness and kurtosis to check the normality of all the variables used. Skewness measures the direction and degree of asymmetry. A value of zero indicates a symmetrical distribution. A positive value indicates skewness (longtailedness) to the right while a negative value indicates skewness to the left. Values between -3 and +3 indicate are typical values of samples from a normal distribution. While Kurtosis measures the heaviness of the tails of a distribution.

The usual reference point in kurtosis is the normal distribution. If this kurtosis statistic equals three and the skewness is zero, the distribution is normal. Unimodal distributions that have kurtosis greater than three have heavier or thicker tails than the normal. These same distributions also tend to have higher peaks in the center of the distribution (leptokurtic). Unimodal distributions whose tails are lighter than the normal distribution tend to have a kurtosis that is less than three. In this case, the peak of the distribution tends to be broader than the normal (platykurtic). Negative kurtosis indicates too many cases in the tails of distribution while positive kurtosis indicates too few cases.

**Table 4.3.1: Means, Standard Deviations, Kurtosis and Skewness of the variables**

Statistics						
	GDP	INF	FDI	RER	RIR	TOT
N Valid	10	10	10	10	10	10
Mean	19874.0000	11.0000	832.9000	76.1000	9.1000	15.8000
Std. Deviation	7151.18048	6.28932	396.64690	20.34945	5.82046	2.14994
Skewness	.558	1.437	.546	-.310	.422	.406
Std. Error of Skewness	.687	.687	.687	.687	.687	.687
Kurtosis	-1.503	3.763	-1.568	-1.652	-1.120	.270
Std. Error of Kurtosis	1.334	1.334	1.334	1.334	1.334	1.334
Minimum	12690.00	2.00	396.00	48.00	1.00	13.00
Maximum	30350.00	26.00	1400.00	98.00	18.00	20.00

*Source: Statistical Package for the Social Science (SPSS) spreadsheet*

These figures indicate normal curves for all the variables with positive values of skewness indicating a tail to the right except for real exchange rate.

#### **4.4 Hypothesis and Hypothesis testing**

Normality uses the null hypothesis of normality against the alternative hypothesis of non-normality. If the probability value is less than the Jacque Bera chi-square at the 5% level of significance, the null hypothesis of the regression is not rejected. All the variables are

normally distributed since all the probabilities are less than the Jarque Bera chi-square distribution.

Values for FDI and GDP were input into the Statistical Package for the Social Science (SPSS) spreadsheet and the Pearson Moment Correlation was computed. The result is shown in Table 4.3.2.

**Table 4.3.2: Correlation coefficient for the variables**

Correlations

		GDP	INF	FDI	RER	RIR	TOT
GDP	Pearson Correlation	1	.603	.991	-.993	-.803	.856
	Sig. (2-tailed)		.065	.001	.001	.005	.002
	N	10	10	10	10	10	10
INF	Pearson Correlation	.603	1	.580	-.627	-.765	.805
	Sig. (2-tailed)	.065		.079	.052	.010	.005
	N	10	10	10	10	10	10
FDI	Pearson Correlation	.991	.580	1	-.981	-.782	.851
	Sig. (2-tailed)	.001	.079		.001	.007	.002
	N	10	10	10	10	10	10
RER	Pearson Correlation	-.993	-.627	-.981	1	.853	-.858
	Sig. (2-tailed)	.001	.052	.001		.002	.001
	N	10	10	10	10	10	10
RIR	Pearson Correlation	-.803	-.765	-.782	.853	1	-.797
	Sig. (2-tailed)	.005	.010	.007	.002		.006
	N	10	10	10	10	10	10
TOT	Pearson Correlation	.856	.805	.851	-.858	-.797	1
	Sig. (2-tailed)	.002	.005	.002	.001	.006	
	N	10	10	10	10	10	10

**Source:** Statistical Package for the Social Science (SPSS) spreadsheet

A correlation coefficient of 0.991 shows a positive strong relationship between foreign direct investments and economic growth in Kenya.

Both the FDI and GDP have strong and positive relationships with inflation and terms of trade. However, foreign direct investment and economic growth don't have any relationship with exchange rates and interest rates in Kenya; this can be seen from the negative correlation figures. In general both the exchange rate and interest rate don't seem to have any positive relationship with the variables under study but they are positively related between themselves.

To test the hypothesis, a two-tail test was conducted at 0.05 test level, (+1.96) with N-2 degrees of freedom (10-2=8). The results are presented on the table below.

**Table 4.3.3: Summary of hypothesis testing**

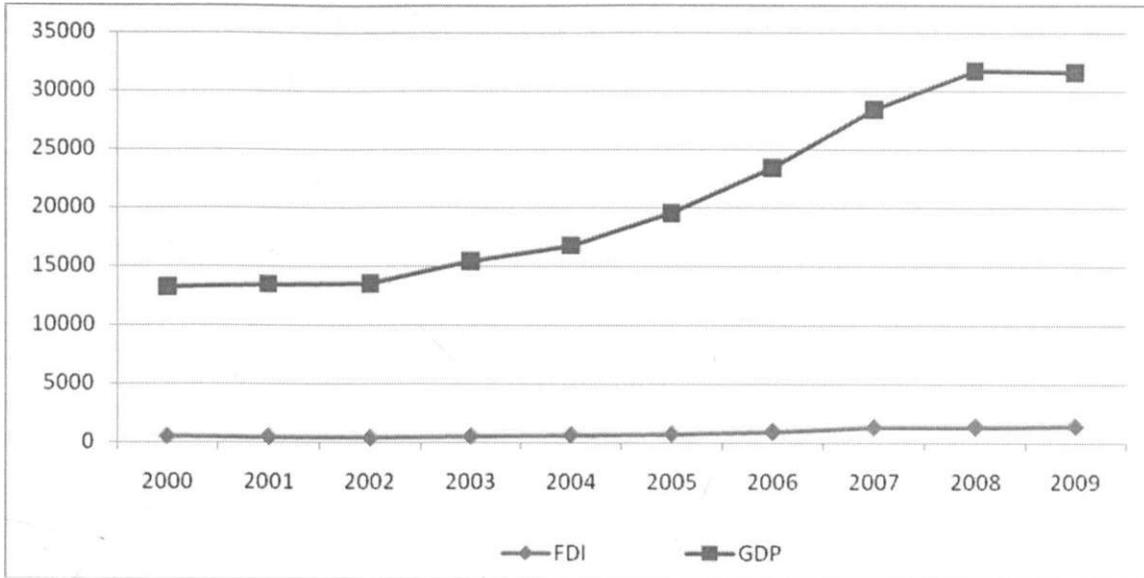
		GDP	INF	FDI	RER	RIR	TOT
GDP	t-calculated		2.14	5.04	(5.04)	(3.83)	4.50
INF	t-calculated	2.14		2.01	(2.28)	(3.36)	3.83
FDI	t-calculated	5.04	2.01		(5.04)	(3.60)	4.50
RER	t-calculated	(5.04)	(2.28)	(5.04)		4.50	(5.04)
RIR	t-calculated	(3.83)	(3.36)	(3.60)	4.50		(3.71)
TOT	t-calculated	4.50	3.83	4.50	(5.04)	(3.71)	

**Source:** Calculated from correlation figures in Table 4.3.2

From the above table, the t-value (5.04) calculated for FDI and GDP, is greater than the critical value (1.96), therefore we reject the null hypothesis and accept the alternative hypothesis that there is a significant relationship between foreign direct investments (FDI) and economic growth (GDP) in Kenya. This is a strong positive relationship.

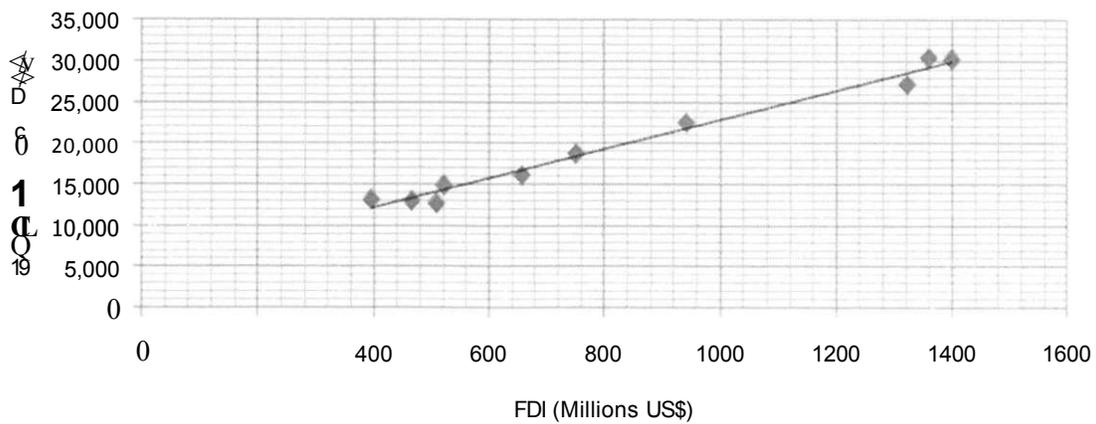
Graphical representation of economic growth and foreign direct investment in Kenya also show a direct proportional relationship and shown in graph 4.3.4 and graph 4.3.5.

**Graph 4.3.4: Graphical trend analysis for Gross Domestic Product and Foreign Direct Investment from 2000 to 2009**



**Graph 4.3.5: Foreign Direct Investment against Gross Domestic Product (line of fit for the period 2000 to 2009)**

**FDI against GDP line of fit**



- FDI against GDP line of fit
- Linear (FDI against GDP line of fit)

From graph 4.3.5, a simple linear function for GDP and FDI can be derived.

$$Y = aK + b;$$

Where;

Y= Gross Domestic Product

K = Foreign Direct Investment

a = the slope of the graph

b = the y-intercept

$$\text{Thus, } Y = 18K + 5,000 \dots\dots\dots 8$$

An increase in foreign direct investment causes an increase in economic growth if all factors are held constant.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Summary of Findings and Conclusions

Is there a relationship between Foreign Direct Investment and Economic Growth in Kenya? Statistics from table 4.2.1 and 4.2.2 on FDI and GDP values for Kenya respectively, from 2000 to 2009, and the results of the Pearson Moment Correlation computed in table 4.3.2 and show that there is a strong and significant positive relationship between foreign direct investment and economic growth in Kenya. This positive relationship means that there is a direct proportionate relationship between foreign direct investment and economic growth.

The results show that other factors also played a role as it had earlier been envisaged. In particular, both inflation and terms of trade were found to be very important and influential in explaining changes in both economic growth and foreign direct investment. This means improved inflation rates and better terms of trade to foreign investors would go a long way in improving the level of foreign direct investments and economic growth. Inflation affects foreign direct investment because of the uncertainties associated with it and the fear of lower returns from future investments.

Both real exchange rate and interest rate have negative correlation, indicating the two variables have no effect on economic growth and FDI. This means depreciation of the real exchange rate has no impact on foreign investments. However, caution must be taken when depreciating the local currency because confidence of foreign investors may be eroded with time. This may also have a negative influence particularly when it comes to importation of intermediate goods used as raw materials in the local manufacturing sector and capital investment goods. Increased real interest rates act as a detriment to investment by increasing the cost of investment funds. However, from this study there is no

relationship found between the real interest rates and both FDI and economic growth, possibly an **indication that such relationship** may not exist for foreign investments.

Finally, although these factors affect foreign direct investment and economic growth, other factors like unfavorable political climate and macro-economic environment that accompanies it must have played an important role and may have been responsible for the fluctuating trend and little growth experienced over the period of study. Kenya is also very much dependent on agriculture but the climatic conditions have not been favorable for increased foreign investment in this area and thus its contribution to economic growth.

## **5.2 Conclusions and Recommendations**

The issue of whether foreign direct investment leads to economic growth is still a debatable one. What is clear is that the relationship may be significant or insignificant depending on the country under study, type of investments, the adjective of the donor country, the implementation policy of the recipient country, the methodology used, and the period of study. In Kenya, there is a positive and strong relationship between foreign direct investment and economic growth and thus the impact of FDIs on the country's economy cannot be wished away.

Since there is a positive and strong relationship between foreign direct investment and economic growth in Kenya, to effectively manage these foreign investments so that the masses can feel the impact, the following measures can be taken:

The government of Kenya should divert a larger portion of FDI to investment in agriculture because about 70% of its population depends on agriculture. Agricultural trade liberalisation is particularly important and growth in agriculture has a proportionate effect on economic growth.

Aid donors and foreign investors should provide a framework for the implementation of aid funds. Foreign investment can and does have an impact when provided within a framework that acknowledges the drivers for broad based growth. Well-targeted investment increases the ability of Kenya to maximise the benefits of trade liberalisation, improve the environment for investment and ensure that the poor have the ability to contribute in achieving growth.

Kenya witnessed an average GDP growth of \$3 billion from 2004 to 2008; basic social indicators still remain some of the worst in the world. There are many reasons for this but the most important are; corruption, and Poor governance, which have allowed revenue windfalls to be squandered and have impeded growth and development. Corruption has a substantial negative impact on economic growth and development and weakens institutions. As such, the Kenya Anti-corruption body should be strengthened with the necessary powers to execute its functions effectively.

### **5.3 Limitations of the Study**

Several limitations have been realized during the time the data has been gathered.

Data from the government from Kenya is analyzed and stored by different entities, thus no centralization. Conclusive data for economic growth was retrieved from the Ministry of Planning and National Development while figures for foreign direct investment are under the custody of the Central bank. Values for the rest of the variable were available from different sources including the World Bank. Data relating to inflation, exchange rate and terms of trade is inadequate in some government sources. Finally, there is the limitation of time allocated for the study.

#### **5.4 Suggestions for further Research**

Because of the importance of this topic, further research can be carried out in the following areas:

The effectiveness of foreign direct investments in Kenya: This study will be necessary to establish if all the foreign investment to Kenya is effectively implemented and find out whether such implementation has some effect on the economy.

Foreign direct investment and its impact on growth, development and poverty reduction in Kenya: The new aspect of poverty reduction has always been a puzzle and such a project will not only measure the impact on economic growth but also establish if such growth translates to poverty reduction.

"Corruption and bad governance" barriers to the positive impact on foreign investments and economic growth in Kenya: This study will be important to enable researchers and policy makers know if non-economic factors like politics and good governance have any impact of foreign investment.

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## TABLES AND GRAPHS

*Table 7.1.1: Figures for GDP, FDI, Inflation, Real exchange rates, Terms of trade and Real Interest rates in Kenya for the year 2000 to 2009*

YEAR	FDI Figures (Millions of US\$)	GDP Figures (millions of US\$)	INFLATION (INF)%	REAL EXCH RATE, RER (KSH -USD)	TRADE % OF GDP (TOT)	REAL INTR RATE, RIR (%)
2000	509	12,690	10	98	14	15
2001	466	12,990	6	98	15	18
2002	396	13,150	2	98	13	17
2003	522	14,900	10	88	13	10
2004	658	16,100	12	85	16	5
2005	752	18,740	10	76	16	8
2006	943	22,500	15	65	17	5
2007	1,323	27,120	10	57	17	8
2008	1,360	30,350	26	48	20	1
2009	1,400	30,200	9	48	17	4

*Source: World Bank Development indicators*

*Table 7.1.2: Net FDI Inflows to Kenya and other Developing Countries (Billion US\$)*

TABLE 2.3: NET FDI INFLOWS TO KENYA AND DEVELOPING COUNTRIES: (US & BILLION)								
	2000	2001	2002	2003	2004	2005	2006	2007*
East Asia & Pacific	45.2	48.9	59.4	56.8	70.3	104.2	105.0	117.4
Europe & Central Asia	24.8	26.6	26.1	34.9	63.5	72.2	124.6	161.6
Latin America & the Caribbean	79.5	72.1	53.0	42.3	64.6	70.4	70.5	107.2
Middle East & North Africa	4.8	4.2	4.9	8.2	7.1	14.4	27.5	30.5
South Asia	4.4	6.1	6.7	5.4	7.6	10.0	22.9	28.9
<b>Sub-Saharan Africa</b>	<b>6.8</b>	<b>15.1</b>	<b>10.5</b>	<b>14.4</b>	<b>12.5</b>	<b>17.3</b>	<b>17.1</b>	<b>25.3</b>
<b>Kenya</b>	<b>0.11</b>	<b>0.01</b>	<b>0.03</b>	<b>0.08</b>	<b>0.05</b>	<b>0.02</b>	<b>0.05</b>	<b>0.73</b>
<b>Total</b>	<b>165.6</b>	<b>173.0</b>	<b>160.6</b>	<b>162.1</b>	<b>225.7</b>	<b>288.5</b>	<b>367.7</b>	<b>471.6</b>
* Estimate								
Sources: Global Development Finance (2008) & Economic Survey 2008								