

**THE EFFECT OF PUBLIC DEBT ON FOREIGN DIRECT  
INVESTMENTS INFLOWS IN KENYA**

**BY**

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## **DECLARATION**

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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

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## **DEDICATION**

I dedicate this thesis to my spouse Michelle and my daughter Noelle Imani. This thesis would not have been possible without their constant support, humility, time and encouragement which have contributed immensely to the success of this study. Thank you and God bless you abundantly

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## **LIST OF ABBREVIATIONS**

<b>CBK</b>	Central Bank of Kenya
<b>EU</b>	European Union
<b>FDI</b>	Foreign Direct Investment
<b>GDP</b>	Gross Domestic Product
<b>HIPC</b>	Highly Indebted Poor Countries
<b>IMF</b>	International Monetary Fund
<b>LDC</b>	Less Developed Countries
<b>LIC</b>	Low Income Countries
<b>KES</b>	Kenya Shilling
<b>MDRI</b>	Multilateral Debt Relief Initiative
<b>MNC</b>	Multi-National Corporation
<b>SPSS</b>	Statistical Package for Social Sciences
<b>SSA</b>	Sub-Saharan Africa
<b>USD</b>	United States Dollar

## ABSTRACT

The biggest challenge facing LDCs to attain sustained and equitable economic growth and development is inadequate domestic financial resources. This has led to heavy reliance by most LDCs on external capitals such as foreign direct investment, concessional lending and remittances and foreign aid. Huge dependence on foreign capital has however exposed the country to high levels of external debt. Despite the fact that 60% of the LDCs have either benefited or are working towards benefiting from the debt relief under the Heavily Indebted Poor Countries (HIPC) initiative and Multilateral Debt Relief Initiative (MDRI) and other bilateral donors, they are still struggling with high debt burdens. Kenya is facing the same predicament with accumulation of public debt and shrinking foreign aid especially from the 90s after the freezing of donor aid. This study sought to determine the effect of public debt on foreign direct investments inflows in Kenya. The independent variable was public debt as measured by quarterly public debt in natural logarithm form. The control variables were economic growth as measured by quarterly GDP, exchange rates as measured by quarterly exchange rate between KES and USD and inflation rates as measured by quarterly CPI. FDI inflows in Kenya were the dependent variable which the study sought to explain and it was measured by FDI inflows in the country on a quarterly basis. Secondary data was collected for a period of 10 years (January 2007 to December 2017) on a quarterly basis. The study employed a descriptive research design and a multiple linear regression model was used to analyze the relationship between the variables. Statistical package for social sciences version 21 was used for data analysis purposes. The results of the study produced R-square value of 0.278 which means that about 27.8 percent of the variation in FDI inflows in Kenya can be explained by the four selected independent variables while 72.2 percent in the variation was associated with other factors not covered in this research. The study also found that the independent variables had a strong correlation with FDI inflows ( $R=0.527$ ). ANOVA results show that the F statistic was significant at 5% level with an F statistic of 3.367. Therefore the model was fit to explain FDI inflows in Kenya. The results further revealed that individually, public debt, economic growth, exchange rates and inflation rates are not significant determiners of FDI inflows in Kenya. This study recommends that there is need for policy makers to regulate public debt levels prevailing in the country bearing in mind that they influence FDI inflows in the country.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Public debt is a major macroeconomic indicator which portrays the image of the country in the international markets (Abbas & Christensen, 2007). It is among the main determinants of the inward foreign direct investment flow. The world has experienced a dramatic increase in the flow of transnational investments following increased internationalization and globalization of firms. Firms are moving their capital to countries where they find opportunities so as to optimize their returns (Sharifi-Renania & Mirfatah, 2012). Additionally, since the main source of borrowing for governments is issue of securities, their interest rates, terms and other debt financing costs affect the economy, sustainability of enterprises and the social welfare of both present and future generations to a large extent, Martin (2009) opine that public debt further serves as a means of delaying taxation thus reducing current distortions.

The governments of weak and poor economies continue to be confronted by the problem of public debt globally since the debt levels, especially among the Low-Income Countries (LICs) and Highly Indebted Poor Countries (HIPCs) have for a long been a matter of discussion among the bilateral lenders and the international financial institutions leading to various initiatives from the international financial institutions and developed countries to reduce the debt burden which was becoming a threat to HIPCs' economies (Abula & Adofu , 2010). A wide range of initiatives were then formulated to reduce debt burden .This included outright debt forgiveness and debt rescheduling. Huge public debt which implies to the sum of both domestic and external debt largely contributed to economic crisis in most developing

nations after World War II when political independence was gained (Ribeiro, Vaicekauskas & Lakštutienė, 2012).

Any resources which are borrowed should be used efficiently and productively to increase the debt financing capacity through optimization of available resources. Misusing of resources results in rapid accumulation of debts to unsustainable levels and thus slows down the growth of most underdeveloped and emerging economies. External debt has in most instances been used to ascertain the level of public debt in developing nations. Previous studies have examined external debt for two reasons. The first argument is that while external borrowing increases the access to the resources of a country, domestic borrowing only allows for resource transfer within the country. Hence, the “transfer” problem is only generated by the external debt (Keynes, 1929). Secondly, since the developing countries' central banks cannot print the hard currency that can be used for the payment of external debt makes external borrowing makes external factors a major factor that could trigger debt crisis in the country (Panizza, 2009).

In most of sub-Saharan Africa, there is a large likelihood of being indebted, poor infrastructure, absolute poverty , poor economic performance and high unemployment. All this is despite a massive foreign aid culture acquired over the years. Averagely, the per capita income in the region has subsided since the years 1970 despite the high aid inflows and hence prompting aid donor agencies to review their earlier discussions on the effectiveness of foreign aid on economies and their growth (Lancaster, 1999).

### **1.1.1 Public Debt**

Makau (2008) defines Public debt as a nation’s total debt comprising of national and local government debt, which is a portion of public spending financed by borrowing in place of the

collection of taxes. Akram (2010) classifies public debt into the summation of both domestic debt and foreign debt. According to Martin (2009) public debt is one of the ways in which governments finance their operations. Governments also avoid paying interest by monetizing their debts. The domestic debt is created through various ways such as overdrafts from the central bank, treasury bills, bonds multilateral loans, suppliers' credit and loans from foreign commercial banks.

According to Ariyo (1997) and Klein (1994) , high reliance on external resources of financing to build a strong capital formation in the domestic economy is the main cause for increased debt. Debt sourced finance refers to funds that have fixed contractual obligations, where future resources of a country are used as collateral. The debt service capacity of a nation should grow at a higher rate than that of its financial risk exposure in order to enable it to adequately service its debts. Moreover, the non-debt resources represent flow of funds without compulsory or fixed obligations on the government. The magnitude of such resources are however dependent on the perception of the foreign investor towards the recipient countries' investment environment (Matiti, 2013).

### **1.1.2 Foreign Direct Investments Inflows**

The common goal of all businesses is wealth maximization and businesses will seek all ways to remain profitable and increase shareholders' wealth. Muema (2013) defined FDIs as investments that are meant to be long-lasting and those that are outside the economic or physical boundaries of the investor. The beneficiary country of FDI is equipped with capital flow as well as technology flow that will aid in its development. When a country seeks to invest in another, the benefit it seeks to achieve must be higher than the risks it must deal with. UNCTAD (2002) describes three different types of FDI. These are: reinvested earnings,

equity capital and other capital which mainly consist of intercompany loans. FDI's create new job opportunities as upon setting of the business, recruitment and training of the locals in the host country is undertaken transferring skills and technological know-how as well as providing jobs. According to Kinuthia (2010), FDI usually represents long-term commitment to the host country. It is a preferred form of investment because it has no obligations to the host country.

FDI is important in adopting new technologies, skills and managerial capabilities in the different sectors of the economy which are traditionally difficult to raise through use of domestic savings, and if not, there would be difficulty in importation of the technology from abroad. This would be compounded by the fact that transferring technology to firms with little experience is risky and they will find difficulty in the use of it and it comes at a great cost (Olson, 2008). FDI is responsible for many externalities that come in the form of benefits to the home country that are not responsible for generating incomes to the host country. FDI is important for developing countries as it avails resources necessary to optimize the level of economic development (Ismaila & Imoughele, 2010). The reason for this is that their economies face challenges such as low domestic savings, revenues, low levels of productivity and low foreign exchange earnings.

A country's appeal for FDI is affected by changes in restrictions that include removal of government barriers to trade as well as privatization of government agencies. Potential economic growth also influences the appeal of the country for FDI as countries with greater economic growth potential may enable the firms to take advantage of that growth by setting up business there. Exchange rates and tax rates make up some factors that influence a country's appeal for FDI. Low tax rates on corporate profits are more likely to attract Foreign

Direct Investment while firms prefer to direct FDI to countries where the local currency is expected to appreciate against their own currency.

### **1.1.3 The Effect of Public Debt on Foreign Direct Investments**

According to economic theory, public debt is good for a country's economic growth. However, this is only possible up to a certain level beyond which its effects are adverse to an economy. The theory of debt overhang as explained by Krugman (1988) clearly demonstrates how accumulation of high public debt leads to low FDI inflows translating into low economic growth of a country. According to Krugman (1988), debt overhang refers to a situation where the existing external debt is very large. The theory suggests that foreign investors will be discouraged from investing in a country that has a large external debt since part of their proceeds would be used to service the debt through high taxation. On the other hand, the theory postulates that reducing debt obligation results to a rise in both domestic and foreign direct investment thus minimizing the chances of debt default

Ostadi and Ashja (2014) shows that external debts have a notable negative impact on FDIs , and that a rise in foreign debt affects the vision of the foreign investor and creates negative perception about the future economy which lead to a decline in the country's level of investment. The outcome further indicated that the size of the government contributes to slow foreign investment which is in line with crowding out effects and shows that the presence of government reduces the presence of private sector. Wamboye (2012) studied external debt, trade and FDI on economic growth growing economies. From the findings, it was concluded that high external debt deters economic growth, despite the type of the debt.

According to Schnitzer (2000), the sovereign risks attributed to debt financing are generally less severe than those attributed to FDI. Therefore, the investor chooses FDI if he thinks he



is eligible to execute the project in question under all the likely risks and has an ideal outside option affects creeping expropriation (Ribeiro, Vaicekauskas & Lakstutiene, 2012). Therefore they find a positive relationship between FDI and public debt. Udomkerdmongkol, Gorg and Morrissey (2013) conducted an empirical investigation on External debt, FDI and domestic investment. The findings show that investment is not in any way influenced by foreign debt. Additionally, no known evidence exists which shows the association between external debt financing and domestic investment in the two regimes.

#### **1.1.4 Public Debt and Foreign Direct Investments in Kenya**

Since independence, Kenya has been involved in provision of public of goods which are key components of economic growth hence improving the living standards of its citizens. However, most of the funds used to fund such projects are usually sourced from international markets, grants and foreign aid. The external debt has been used by the Kenyan government to fund its industrial and agricultural sectors. The two sectors are critical in the economy since they are the major source of foreign currency which is used to service the external debts (Were, 2001).

In Kenya many people have not only blamed retarded economic growth due to poor governance and corruption but also increasing public debt. Increasing public debt has serious macroeconomic problems which can lead to poor social and economic status of a country (Government of Kenya, 2012). From statistics, it is evident that public debt ratio to GDP and public debt service ratio to GDP have been fluctuating since 1980. However, the highest public debt ratio (131.90) was recorded in year 1993 while the lowest (21.24) was recorded in the year 2008. On the other hand, the highest public debt service ratio to GDP (12.33) was recorded in the year 1994 while the lowest (1.00) was recorded in the year 2010.

FDI in Kenya is covered in all the sectors, be it in the banking, automobile or telecommunications sector. Various multinational companies have set up operations in Kenya and they include Car and General, Coca-Cola as well as communication firms like Airtel. In every aspect of our lives, FDI is felt that is in the goods and services that we use. FDI is not in isolation as they have provided jobs and with them, technical knowledge as they train their Kenyan employees to maintain the standards that are there in their other investments all over the world. They are the major source of foreign exchange to the country. FDI has not been consistent over the years with some periods recording low inflows. In the 1980s and 1990s, FDI inflow was low due to deterioration in economic performance as well as rising problems of poor infrastructure and the high cost of living greatly impacted negatively on FDI inflows in Kenya (KPMG, 2012). In total, Kenya has more than 200 multinational companies across the sectors with Britain, USA, Germany, South Africa, Netherlands, Switzerland, China and India being the main traditional sources of FDI (Kinuthia, 2010).

Kenya serves as the East African business hub for many international businesses. This translates to a dependence of FDI for capital inflow that in turn reflects on provision of jobs and an economy that is helped to grow by these foreign investments. Kenya's FDI average percentage growth between 2007 and 2016 was forty percent (40%) with the inflows primarily channelled into retail and consumer products, technology, media, telecommunications, minerals, oil and natural gas sector mainly from the UK, USA and India (Ernest & Young, 2015). This growth rate earned Kenya the status of a FDI hotspot joining other African Countries such as Ghana, Tanzania, Zambia, Uganda, Nigeria Mozambique, and Rwanda. In 2016, FDI inflows stood at USD 1076.9 million (KES 105.29 billion), up from USD 670 million (KES 65.51 billion) a year earlier which is a sixty percent (60%)

increase. This capital mainly went to oil, gas and the manufacturing industries (UNCTAD, 2016).

## **1.2 Research Problem**

Lack of domestic financial resources has been identified as the main challenge facing LDCs as they seek to attain sustained and equitable economic growth and development. This has led to heavy reliance by the LDCs on external sources of capital such as foreign aid, foreign direct investment, remittances and concessional lending. This heavy dependence on foreign capital has led to accumulation external debt high levels which is harmful to the country. Despite the fact that approximately 60% of the LDCs have accrued benefits or are working towards gaining from debt relief under the Multilateral Debt Relief Initiative (MDRI) and Heavily Indebted Poor Countries (HIPC) initiative and other bilateral donors, they are still struggling with high debt burdens. Kenya is facing the same predicament with accumulation of public debt and shrinking foreign aid especially from the 90s after the freezing of donor aid.

Kenya's public debt stands at 53 percent of GDP (Government of Kenya, 2016). Many scholars have shown interest in studying the impact of public debt on the economic development of the developing economies. Those in support of external debt argue that governments that rely on external debts are capable of eradicating bottlenecks in their economies thus making full use of their resources. Maximum utilization of the resources has a direct link to economic growth. Those against external debt argue that such actions by developing countries' economies are likely to hamper economic growth through its negative effect on economic growth handles (Tchereni et al., 2013).

Several studies have been conducted on foreign direct investment and government debt. For instance, According to Borensztein (1990), in an analysis of Philippines economy between Philippines 1970-90 increasing the stock of foreign debt leads to deterioration in domestic investment. A study by Neumann (2003) further postulates a different approach to FDI interaction and domestic investment by increasing international debt. According to Schnitzer (2000), FDI is associated with more severe sovereign risks compared to those that come with FDI. Ostadi and Ashja (2014) show that external debts negatively influence FDIs and that a rise in foreign debt has damaged the vision of the investor and yielded negative perceptions about the future economic situation which similarly reduces the country's investment.

Locally, existing studies have either considered public debt or FDI separately. Kibui (2009) studied the effect of external debt on public investment and Kenya's economic growth (1970-2007). The results indicate that debt relief could act as a catalyst for investment recovery and economic growth in Kenya. Harmon (2012) examined the effect of public debt on GDP growth, Interest rates and inflation in Kenya. From the findings, it was concluded that a single analysis could not be used to establish the association between inflation, public debt, Interest rates and GDP growth. Gikandu (2012) examined the association between domestic debt and Kenya's economic growth. From the analysis, a weak positive association was found between the two variables. This implies that domestic debt slightly contributes to economic growth. Matiti (2013) examined the impact of selected public debt determinants in Kenya and established a direct relationship between foreign exchange rates depreciation and public debts. Moki (2012) did an analysis of the association between public debt and economic growth in Africa and established that public debt has a significant positive relationship on economic growth. From the foregoing, it is clear that many studies have been done on public debt and foreign direct investments but most of these studies have not

concentrated on the effect of public debt on foreign direct investments in Kenya. This study therefore sought to answer one research question: What is the effect of public debt on foreign direct investments in Kenya?

### **1.3. Objective of the Study**

To determine the effect of public debt on foreign direct investments in Kenya

### **1.4 Value of the Study**

The study's findings will be used by future researchers, students and scholars who may want to undertake studies in the similar or correlated field as reference. The study will also be beneficial to researchers and scholars in the identification of further research areas on other subject matters by highlighting related topics that need further studies and undertaking a review of the empirical literature to establish the study gaps.

The findings are hoped to be of benefit to policy makers in developing investment strategy policies and developing the necessary institutional framework required to market Kenya as an ideal foreign investment destination. Also, it will help them in coming up with policies that ensure setting public debt levels that are consistent with the objective of attracting foreign direct investments.

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

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents the hypothetical outline applied in the research and reviews previous studies done on public debt and foreign direct investments. It contains the theoretical review, determinants of FDI, empirical review, conceptual framework as well as the summary of the literature review.

#### **2.2 Theoretical Framework**

This presents review of the relevant theories that explains the effect of public debt on foreign direct investments. The theories covered are; Internalization theory, eclectic model theory as well as the theory of products' life cycle.

##### **2.2.1 Internalization Theory**

The theory was established by Buckley and Casson (1976), Rugman (1981) and Hennart (1982). It asserts that proprietary controls over an indefinable, knowledge-based, firm-specific advantage are exerted at firm level of an MNC. The theory claims firms reduce their risk exposure that arises from investments in specialized assets by using vertical FDI. The theory also claims that cost-benefit analysis of significant factors in the home and receiving country will conclude the company's capability to invest in a foreign country. The investment decision as explained in this theory is dependent on both the expected returns and also on a country's specific factors like political stability, demand for products, barriers to entry, cost of production and capital and economies of scale. Carbaugh (2000) explains that companies might choose to invest in countries whose raw materials and labour are cheaper when compared to other countries so as to reduce costs. This can be in part be the reason why there

is movement of direct investment to Asia more so in India and China where the cost of labour is cheaper compared to other countries in the world.

Internalization theory considers that FDI are suitable when the benefits of internalization outweigh costs. MNC possess the technological or managerial knowledge as a key for success and it is also protected in its internal market. Expanding on international market implies developing of new operations and activities, but managed and controlled by the holding company. Even though this theory is more applicable to production and licensing, in term of real estate it could be interpreted through investor's intention to maintain the position and establish quality standards on the foreign market (Casson, 1983).

According to Lehman (2002) FDI can as well be used in gaining control over contributions hence closing out the new rivals. International theory concluded that companies do not outsource their processes since they want to control possible perils as well as retaining a larger market share. It is also evident that transnational firms concentrate on FDI as a strategy of acquiring and sustaining internationalization benefits. As oppose to outside markets, the company relationships, incorporation, shift pricing and economies centralization reduces cost by using FDI. This theory is relevant to this study as it explains the factors considered by an MNC before making investment decisions in foreign countries and thus affect the amount of FDI inflows into a given country.

### **2.2.2 Eclectic Paradigm Theory**

Dunning (1993) came up with this theory that has three diverse but correlated theories. These theories are Ownership, Location and Internalization (OLI) which are used to describe how the factors therein contribute to changes in foreign direct investments. Ownership related advantages are those provided by intangible assets. This assets must however be considered

as exclusive possessions held and owned by the company and are transferable to other firms at prices that would lead to reduction of costs to the company, or would lead to the company registering high rates of return. In his arguments, Dunning (2005) argues that when all other factors are held constant, a company with a higher level of competitive advantages, in comparison with its competitors, has a higher chance in increasing its overall production and hence increasing its global presence.

Location benefits, as explained by Denisia (2010) are used to compare the different economies, as per their strengths and opportunity. The end result of this analysis is that the most suitable country is selected to be a host country for the activities of multinational firms. The correlation existing between location and ownership advantages is that when a multinational corporation is able to host itself in the most suitable economy, it is now able to engage in the exploitation of its ownership related abilities, and thus leading to the firm engaging in foreign direct investment.

Internalization establishes a need for the firm to be able to have an established business in each of the economies that the company sells its products or services. The firm must derive ways through which it can benefit further through foreign production as compared to the meagre fees that are earned in international trade activities such as exporting and franchising. Dunning (2005) states that a corporation is more likely to get higher returns if, it engages in foreign production as opposed to the extension of its production rights to other countries. The eclectic paradigm is therefore in support of the establishment of production markets by a corporation through exploitation of its competitive advantages and the selection of suitable locations. In doing this, the corporations are not only engaging in foreign direct investments but also gaining much more than their competitors.



### **2.2.3 Product Lifecycle Theory**

Based on Vernon theory (1966), a product in the start is formed locally and used before being sold to external markets. However, at the initial phase, the produce is not regulated. For instance, the unit cost is not initiated as well as the final stipulations of the product are not consistent. When the market insists much of product, it will be regulated. In case the local market becomes flooded, the standard product will be selling to overseas markets. At this juncture, the company starts to establish new branches in areas with cheap and adequate manpower where sunk-cost is lower, when the rate of rivalry becomes intensive especially when the product becomes mature. This therefore, indicates that, FDI involves phases in the product life-cycle as it heads towards maturity stage (Dunning, 1993).

The fact that Vernon's theory changes eventually over time, it is enough to say that the product life-cycle is a dynamic theory. Nevertheless, the theory is not empirically confirmed, due to the fact that a few multinational companies begin their processes locally and abroad concurrently (Chen, 1983). The theory is related to the current study as it gives reasons as to why organizations decide to become multinational corporations.

### **2.2.4 Classical Theory of Debt**

The Economists favoured public debt in the 18th century when there was an impact of Mercantilist doctrine. In the 19<sup>th</sup> Century, the role of the state was however constrained within some minimum functions. This was in line with the "Laissez Faire" policy which was widely held by the classical economists. These economists argued that the State functions should be minimized and it was the responsibility of the government to maintain internal law and order manage public works and protect the country against external aggression. They believed there was; perfect market competition, factors of production were purely mobile and

that full employment existed in the economy. They believed more on individualism and assumed that self-interest results in national interest. Government intervention was not necessary in situations where there was a smooth flow of economic activities in case any crisis, it will be automatically settled. When the government is undertaking minimum functions then there arises no doubt of huge public expenditure and for that large public revenue is not compulsory. Furthermore, government did not prefer raising funds in form of public debt simply because they are wasteful in their spending and therefore public debt inflict unbearable burdens to the community.

### **2.2.5 Modern Theory of Public Debt**

In modern finance, the economic philosophy of public debt indicates a great shift from the “Laissez Faire” notions. This situation immediately shifted after the Great Depression of 1930s. The classical theory of public debt had completely failed it did not address unproductiveness and full employment of public expenditure with the required attention. These assumptions formed the basis of classical antagonism towards public borrowing. The Keynes theory appreciates income-generating aspect of the public debt and disregards any likelihood of internal debt being imposed upon the community.

### **2.2.6 Keynesian Theory of Public Debt**

The slow growth in modern theory in public debt has mainly been attributed to Economic crisis brought about by the 1930's economic depression. The traditional view that rapidly rising public debt and constant unbalanced budgets derail the financial stability of countries, gradually opened avenues to the conception which states that a huge public debt is more of a national asset than liability and that countries require continuous deficit spending in order to attain economic property of the nations (of public debt assumed full employment). The

Keynesian approach on the classical principles public finance and budgeting was an extension of the Keynesian attack on the perspective that the economy is in a state of equilibrium at full employment. Keynes assumed that if there were unemployed resources.

Which the private sector could not employ, these resources can be put to use by the by unbalancing the budget. Keynes was of the opinion that increase in public debt through the multiple effects would raise the National Income. He linked public borrowing with inadequate financing and urged government to borrow for all reasons so as to increase employment and output. However he did not clearly distinguish between the unproductive and productive expenditure as the classical. Keynes borrowing for consumption was just as relevant as borrowing for productive goods' investment since consumption expenditure resulted to a rise in investment.

### **2.3 Determinants of Foreign Direct Investments**

FDI involves real assets and this ensures that an investor will be active in managing the assets he is acquiring. There are various factors that make one country more attractive than the others and these factors can also vary from one period to another. These determinants have contributed to studies on reasons behind given states being more victorious Vis a Vis nations in attracting FDI. Quite many researches were done to find out the features that ascertain the FDI but so far there is yet to be a definite consensus. The different approaches to the determinants of FDI do not cancel each other out but clarify diverse facets of similar phenomena (Kinuthia, 2010).

#### **2.3.1 Public Debt**

External debt servicing affects country's economic growth negatively through altering composition of government spending. Higher debt service widens budget deficit thus

reducing public investment (Clements & Nguyen, 2003). The decrease in government spending may be an impediment to foreign direct investment. For instance, infrastructural and labour-oriented investors may be discouraged to consider a country which has low investment in the two areas.

Ostadi and Ashja (2014) show that external debts have a notable negative impact on FDI and that a rise foreign debt has damaged the vision of the investor and resulted in negative future economic expectations which have reduced the country's investment. The findings further indicated that the government size significantly reduces FDI which reduces is in line with crowding out effects and shows that the presence of government reduces the presence of private sector.

### **2.3.2 Economic Growth**

The importance of development in drawing FDI is rather contentious. Charkrabarti (2001) stated that the assumption of growth that was developed by Lim (2001) suggests that a rapid growth in the economy provides more profitable opportunities than those experiencing slow growth or no growth at all. Mishkin and Eakins (2009) from their research study found that growth was positively correlated with FDI while Gastanaga et al., (1998), strongly supported the hypothesis from the periods 1983 to 1986 but showed a weak link from the periods 1975 to 1978.

Contrary to the results, Aoki (2007) found a weak but positive relationship for economies of less developing countries and weak negative relationship for economies of developed countries. Asiedu (2002) found a positive relationship but with lagged growth for countries not in the Sub-Saharan Africa region, but an unimportant influence to the Sub-Saharan Africa region. Gastanaga et al., (1998) found an optimistic influence for growth on FDI.

### **2.3.3 Inflation**

Inflation is very important in managing the macroeconomic environment and fiscal governance. Usually weighed by changes in the customer charge index which is essentially a weighted average price of goods and services consumed (CBK, 2013; Nwankwo, 2006). A high level of inflation is an indicator of tensions in the economic environment of a country and is a reflection of the government's reluctance to have a stable monetary policy. It can be argued that risk-averse foreign investors coupled with high levels of inflation will lead to decreases in FDI in the host country since investors are not willing to risk the profits that they expect from their investments (Kadongo, 2011).

Given high uncertainty levels, investors are bound to demand high price levels in order to offset their exposure to inflationary risks which are bound to lower the volume of investment. Therefore as a move to encourage investments, inflation rate stability is important (Gastanaga et al., 1998). Nwankwo (2006) emphasizes macroeconomic strategy weaknesses as deflecting FDI flows from Africa; he points that, poor monetary and fiscal policies cause unsustainable deficits in budgets and increase inflationary pressures thereby raising the production costs in the local country and thus creating instability in exchange rates and thereby the region becomes a risky destination for FDI as well as to make the region too risky as a destination for FDI. Flux in macroeconomic variables as evidenced by high inflation and extreme budget shortages, limits the country's ability to attract FDI (Onyeiwu & Shrestha, 2004).

### **2.3.4 Exchange Rates**

Exchange rate is an essential component affecting FDI. The eventual importance of exchange rates to the location of FDI was initially suggested by Asiedu (2002). Asiedu stated that different currency areas were responsible for the generation of FDI. Dunning stated that

greater fixed capital stakes of an investment showed the possibility of taking into account future movements in exchange rates (Dunning, 1993). Goldberg (2011) agrees that exchange rates volatility impact location decisions of MNCs. Other research indicates that exchange rate risk contributes significantly in explaining FDI (Gastanaga et al., 1998).

Exchange rate volatility may negatively affect and reduce direct investment. Gastanaga et al., (1998) based on an analysis of macroeconomic factors, institutional and legal frameworks and risk in determining FDI, proved that market size, fiscal deficit, inflation and exchange regime and trade openness were all significant. According to earlier research, exchange rate movements have shown to be relevant and significant to FDI because exchange rate volatility contributes directly to uncertainty in the transaction plan from the countries investing (Behera, 2008).

### **2.3.5 Country Risk**

A number of lessons have established FDI in emerging states to be influenced harmfully by financial and political insecurity. There is copious proof to show the downbeat association involving FDI and political and financial permanence. In a study on overseas owned companies in Africa, Sachs and Sievers (1998) ended that the biggest worry is political and macroeconomic strength, while Lehman (1999) and Jaspersen et al., (2000) discover that states are fewer perilous draw more FDI. Insight of risk in Africa is still enormous as well as each state to hold back foreign direct investment.

### **2.3.6 Availability of Good Infrastructure**

It is habitually affirmed that good roads enlarges the output of savings and therefore encourage FDI flows (Asiedu, 2002). A study by Wheeler and Mody (1992) instituted infrastructure to be very significant and central for upcoming countries. In discussion

concerning infrastructure, it ought to be well-known that this is not restricted to roads alone, but also telecommunications. Accessibility and effectiveness of telephones, for instance, is necessary to ease contact amongst the host and domicile states. Adding up to substantial infrastructure, monetary infrastructure is significant for FDI inflow.

A strongly equipped monetary market is recognized from accessible facts to allow a state to strike the full payback of FDI. Alfaro et al., (2001), applying cross-section data, found that poorly developed monetary infrastructure can negatively affect an economy's capacity to take benefit of the potential markets of FDI. In a study by Bhinda, Griffith-Jones and Martin (1999), it was instituted that tribulations connected to funds enlistment were on the precedence features listed disappointing financiers in Uganda, Tanzania and Zambia.

## **2.4 Empirical Review**

There are numerous empirical studies both locally and internationally to support the affiliation involving exchange rates and stock market outcomes, but these studies have produced mixed results. Azam and Ullah (2011) examined the impact of public debt on foreign direct investment in Pakistan. The result implied that FDI is negatively influenced by the poor debt condition of the country and signifies a relatively unfavourable conditions for foreign investment. Their study also concluded that based on the benefits of foreign investment, the government needs to adopt these policies to attract foreign private investment and reduce external debt through proper debt management policy as the growth of FDI inflows is affected by a rise in public debt.

Okafor (2012) evaluated whether home macroeconomic variables are material determinants for foreign direct savings inflow in Nigeria. He notes that economic theory forecast that foreign capital flows could arouse financial development of countries. The empirical

investigation illustrates the role of key home macroeconomic variables on Foreign Direct Investment (FDI) in Nigeria using the Ordinary Least Square (OLS) inference method. The outcome indicates that actual gross domestic invention, interest rate, and actual exchange rate are key indicators of foreign direct investment in Nigeria. The result proposes that these local macroeconomic variables are significant to FDI inflow.

Udomkerdmongkol, Gorg and Morrissey (2013) conducted an empirical investigation on FDI, external debt and domestic investment. The study utilized the model of Marini and Dalmazzo (2000) to come up with predictions on the importance of three different sources of financing: FDI financing, foreign debt financing and domestic capital self-financing, for domestic investment for the two types of political regimes: politically stable and politically unstable. Based on fixed-effects estimation, the estimation results excluding any political factors are giving positive effects of FDI financing and domestic capital self-financing on domestic investment. No evidence exists on the association between external debt financing and domestic investment in both regimes. The findings show that that foreign debt financing have no impact on investment.

Omweri (2013) studied the determinants of overseas direct savings stock in the five states of the East African Community i.e. Kenya Uganda, Tanzania, Rwanda and Burundi, to find out why the region was recording very low increase of FDI. The study used trade openness, Gross home produce development, Gross Domestic Product per Capita, cell phone line (per 100 people); a proxy for infrastructural facilities, inflation, return on investment and natural resource endowment as independent variables and the stock of foreign direct investment as the dependent variable. Findings showed that business honesty, increase in prices, and infrastructure facilities were the most important controllers of savings to EAC countries.



Locally, Kinuthia (2010) has given new facts to ascertain on the Foreign Direct Investment according to the study of foreign firms in Kenya in 2007. The research reveals that, a number of foreign companies are promotion firms. The study has shown that the key determinants factors are factors like market volume, political environment, as well as economic performance, bilateral business union plus a complimentary atmosphere. However, the three critical barriers of overseas savings inflow to Kenya are political volatility, rate of crime and lack of adequate security, as well as institutional issues most particularly dishonesty.

Matiti (2013) examined the effect of selected determinants on public debt in Kenya. This study made use of descriptive study design and used secondary data. Annual data was used in the computations. The study covered ten years starting 2003 to the year 2012. The findings established that there was a direct relationship between public debt and exchange rates, balance of payments and budget deficit while there was an inverse relationship between public debt and total grants. The policy makers need to evaluate the best exchange rate policy for optimal economic development. The study findings further established that debts and exchange rates had been increasing; grants had been decreasing over years, while budget deficits remained high in the country.

Muinga (2014) examined external public debt and economic growth in Kenya. The study used data from 1970 to 2010 from World Development Indicators and Kenya National Bureau of Statistics. The GDP was the proxy for economic growth. The explanatory variables were capital, labour, interest payments on external debt, external public debt, debt service payments, and inflation. Since the data was in time series the augmented Dickey-Fuller Unit Root test was used to ascertain stationarity. The econometric technique of Ordinary Least Square (OLS) was employed in the data analysis. The results indicated that external debt and

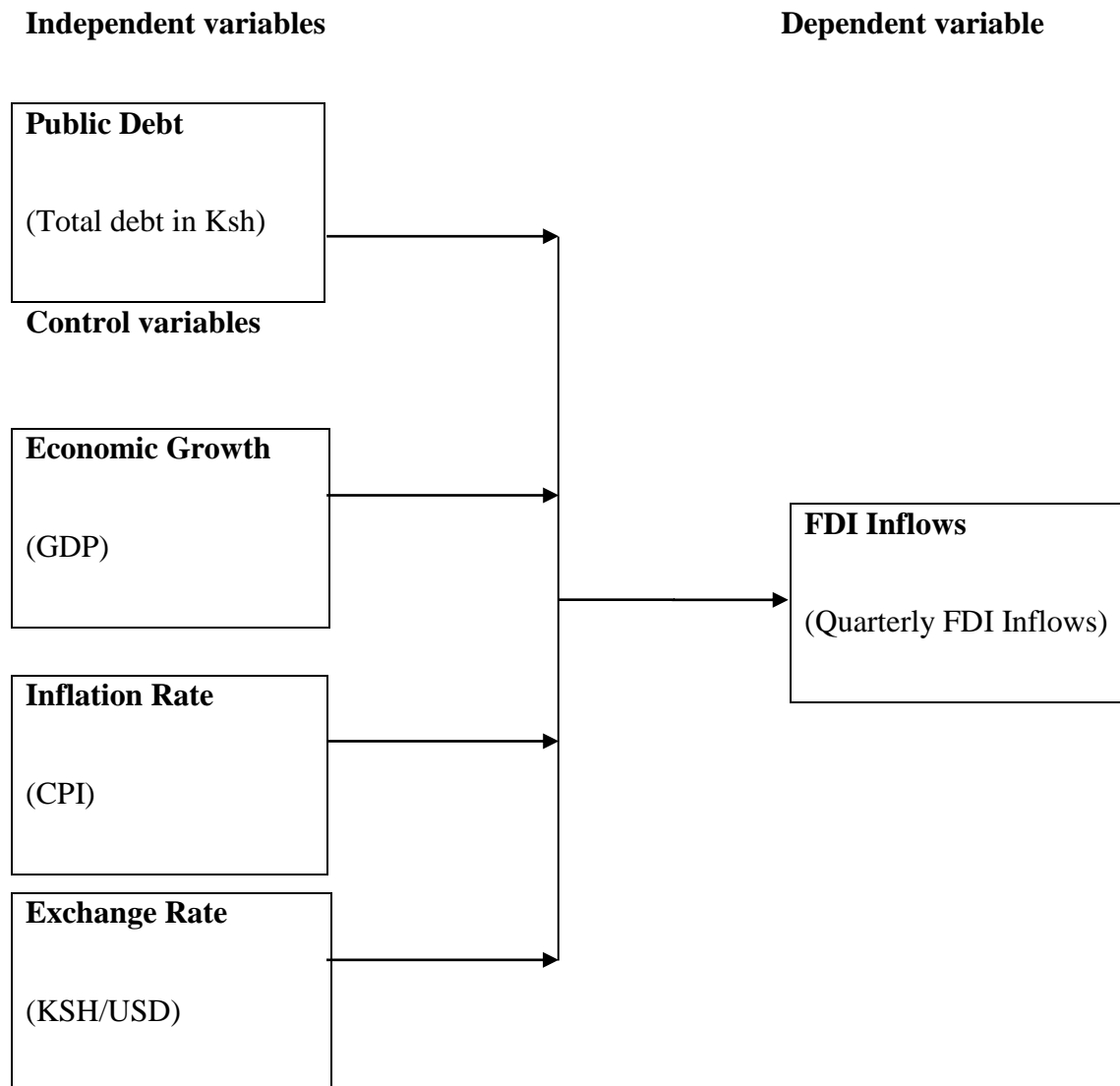
interest payments on external debt payments contribute negatively to economic growth in Kenya. Capital formation and labour force have a significant positive contribution to economic growth. The simulation results showed that any percentage increase of external debt holding other factors constant, will reduce the GDP hence slow economic growth.

## **2.5 Conceptual Framework**

Ostadi and Ashja (2014) shows that external debts have significant negative impact on foreign direct investment, and a rise in foreign debt has damaged foreign investor's vision and led to negative expectations regarding the future economy which together reduce investment in the country. The findings further indicated that the government size has negative effect on attracting foreign investment which is in line with crowding out effects and shows that the presence of government reduces the presence of private sector. The current study seeks to investigate whether this findings hold in Kenya.

The conceptual model developed below portrays this expected relationship between the study variables. The factors characterized here are public debt and foreign direct investments. The independent variable is public debt as measured by natural logarithm of total debt in ksh. The control variables are inflation rates as measured by quarterly CPI, exchange rates as measured by quarterly exchange rate between Ksh and USD and economic growth as measured by quarterly GDP. Foreign direct investment is the dependent variable which the study sought to explain and it was measured by quarterly FDI inflows.

**Figure 2.1: The Conceptual Model**



**Source: Researcher (2017)**

## **2.6 Summary of the Literature Review**

This section of this study explored the various theories advanced for foreign direct investments including the Internalization theory, eclectic paradigm theory and product life cycle theory. This chapter further delineates the various determinants of foreign direct investments which include: economic growth, inflation rates, exchange rates, country risk and

availability of good infrastructure. The chapter also presented empirical studies of the research done by other scholars on the topical area of foreign direct investment determinants both at the local and global scene. From the empirical review, it is evident that certain researches were conducted have to inspect the actual causes of overseas direct savings in the Kenyan context. In addition, previous studies have mostly considered determinants of FDI generally without studying specific determinants. The research intends to equip the study gap by examining the effect of public debt on foreign direct investments in Kenya.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter describes techniques of research applied to objectively establish the influence of public debt on FDI in Kenya. It also shows the population of study, research design, data collection and analysis technique.

#### **3.2 Research Design**

Research plan is defined as a clear copy of those events, taken on by a researcher for examining the affiliation involving dependent variables and independent variables (Khan, 2008). Descriptive design will be adopted for the study. A descriptive study involves a description of all the elements of the population. It allows estimates of a part of a population that has these attributes. Identifying relationships among various variables is possible, to establish whether the variables are independent or dependent.

#### **3.3 Data Collection**

Data was collected exclusively from a secondary source. Quarterly data for ten years (January 2007 to December 2016) was collected and analyzed. Data for the independent variables; public debt, economic growth and inflation was gathered from the Kenya National Bureau of Statistics (KNBS) while data on exchange rate was acquired from the Central Bank of Kenya. Data for the dependent variable; foreign direct investments inflows on a quarterly basis was be obtained from KNBS.

#### **3.4 Diagnostic Tests**

Linearity show that two variables X and Y are connected by an arithmetical equation  $Y=bX$

where  $c$  is a stable figure. The linearity test was obtained through the F-statistic in ANOVA. Normality is a test for the assumption that the residual of the response variable are normally distributed around the mean. This was determined by Shapiro-walk test or Kolmogorov-Smirnov test. Autocorrelation is the measurement of the similarity between a certain time series and a lagged value of the same time series over successive time intervals. It was tested using Durbin-Watson statistic (Khan, 2008).

Multicollinearity is said to occur when there is a nearly exact or exact linear relation among two or more of the independent variables. This was tested by the determinant of the correlation matrices, which varies from zero to one. Orthogonal independent variable is an indication that the determinant is one while it is zero if there is a total linear connected between them and as it strategies to zero then the multicollinearity becomes more intense (Burns & Burns, 2008).

### **3.5 Data Analysis**

Analysis of the obtained figures was made using both expressive and inferential statistics. The Statistical Package for Social Sciences (SPSS) version 21 computer software was applied in the examination since it is more user-friendly. The data was inputted into the SPSS and examined using descriptive, correlation and regression analyses. In descriptive statistics, the study used mean and standard deviation. In inferential statistics, the study used multivariate regression scrutiny to ascertain the correlation involving the dependent variable (foreign direct investments) and independent variables: public debt, economic growth, exchange rate, and inflation rate.

#### **3.5.1 Analytical Model**

Using the collected data, the researcher conducted a regression analysis to institute the causes

of public debt on foreign direct investments in Kenya. The study applied the subsequent regression representation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon.$$

Where;

Y = Foreign direct investments as measured by natural logarithm of FDI inflows on a quarterly basis

$\alpha$  = Constant Term

$\beta_i$  = Beta Coefficient of variable i which measures the change Y to change in i

$X_1$  = Public debt as measured by natural logarithm of total debt in Ksh on a quarterly basis

$X_2$  = Economic growth as measured by natural logarithm of quarterly GDP

$X_3$  = Exchange rate as measured by natural logarithm of average quarterly exchange rate between USD and KES.

$X_4$  = Inflation rate as measured by natural logarithm of average CPI per quarter

$\varepsilon$  = Error term

### 3.5.2 Tests of Significance

To test the statistical importance the F- test and the t-test were used at 95% confidence level.

The F statistic was utilized to establish a statistical significance of regression equation while

the t statistic was used to test statistical implication of study coefficients.

## CHAPTER FOUR

### DATA ANALYSIS, FINDINGS AND INTERPRETATION

#### 4.1 Introduction

This chapter represents the results and findings of the study based on the research objective. The chapter focused on the analysis of the collected data from CBK and KNBS to establish the effect of public debt on foreign direct investments in Kenya. Using descriptive statistics, correlation analysis and regression analysis, the results of the study were presented in form of tables for easy interpretation.

#### 4.2 Diagnostic Tests

The researcher carried out diagnostic tests on the collected data. The research assumed a 95 percent confidence interval or 5 percent significance level (both leading to identical conclusions) for the data used. These values helped to verify the truth or the falsity of the data. Thus, the closer to 100 percent the confidence interval (and thus, the closer to 0 percent the significance level), the higher the accuracy of the data used and analyzed is assumed to be. To test for normality, the null hypothesis for the test was that the secondary data was not normal. If the p-value recorded was more than 0.05, the researcher would reject it. The results of the test are as shown in Table 4.1.

Both Kolmogorov-Smirnova and Shapiro-Wilk tests recorded o-values greater than 0.05 which implies that the research data was normally distributed and therefore the null hypothesis was rejected. The data was therefore appropriate for use to conduct parametric tests such as Pearson's correlation, regression analysis and analysis of variance.



**Table 4.1: Normality Test**

FDI Inflows	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Public Debt	.178	40	.300	.881	40	.723
Economic Growth	.176	40	.300	.892	40	.784
Exchange rates	.181	40	.300	.896	40	.792
Inflation rates	.173	40	.300	.918	40	.822
a. Lilliefors Significance Correction						

**Source: Research Findings (2017)**

#### **4.4 Descriptive Analysis**

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations in this study. Table 4.2 below shows the descriptive statistics for the variables applied in the study. An analysis of all the variables was obtained using SPSS software for the period of ten years (2007 to 2016) on a quarterly basis. FDI inflows had a mean of 49.58 with a standard deviation of 36.335. Public debt recorded a mean of 6.677120 with a standard deviation of 0.2065388. Economic growth resulted to a mean of 5.893685 with a standard deviation of 0.0761285. Exchange rate resulted to a mean of 81.17 with a standard deviation of 10.002 while Inflation had a mean of 8.290545 and standard deviation of 4.5644054.

**Table 4.2: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
FDI Inflows	40	17	211	49.58	36.335
Public Debt	40	6.3790	7.0530	6.677120	.2065388
Economic Growth	40	5.7803	6.0219	5.893685	.0761285
Exchange rate	40	63	104	81.17	10.002
Inflation rate	40	2.7136	19.1870	8.290545	4.5644054
Valid N (listwise)	40				

**Source: Research Findings (2017)**

#### **4.4 Correlation Analysis**

Pearson correlation was employed to analyze the level of association between FDI inflows and the independent variables for this study (public debt, economic growth, foreign exchange rates and inflation rates). From correlation analysis, the study showed the existence of a weak positive and significant correlation between public debt and FDI inflows into the country ( $p=.448$ ,  $p>.004$ ). This goes to show that the level of public debt in a country has a significant association with FDI inflows into the country. The relationship between economic growth and FDI inflows was found to be weak and positive ( $p=.431$ ,  $p>0.005$ ). This implies that movement in economic growth is positively correlated to FDI inflows and in a significant manner. The study also showed that there exist a weak positive correlation between exchange

rates and FDI inflows ( $p=.426$ ,  $p>.006$ ). This shows that exchange rates have a weak positive association with FDI inflows and the association is significant. The relationship between inflation and FDI inflows was found to be weak and negative ( $p=-.252$ ,  $p>0.116$ ). This implies that movement in the inflation rate is negatively correlated to FDI inflows but not in a significant manner. Although the independent variables had an association to each other, the association was not strong to cause Multicollinearity as all the  $r$  values were less than 0.70. This implies that there was no Multicollinearity among the independent variables and therefore they can be used as determinants of FDI inflows into the country in regression analysis.

**Table 4.3: Correlation Analysis**

Correlations						
		FDI Inflows	Public Debt	Economic Growth	Exchange rate	Inflation rate
FDI Inflows	Pearson Correlation	1	.448**	.431**	.426**	-.252
	Sig. (2-tailed)		.004	.005	.006	.116
	N	40	40	40	40	40
Public Debt	Pearson Correlation	.448**	1	.688**	.602**	-.091
	Sig. (2-tailed)	.004		.000	.000	.576
	N	40	40	40	40	40

Economic Growth	Pearson Correlation	.431**	.688**	1	.610**	-.110
	Sig. (2-tailed)	.005	.000		.000	.498
	N	40	40	40	40	40
Exchange rate	Pearson Correlation	.426**	.602**	.610**	1	.029
	Sig. (2-tailed)	.006	.000	.000		.860
	N	40	40	40	40	40
Inflation rate	Pearson Correlation	-.252	-.091	-.110	.029	1
	Sig. (2-tailed)	.116	.576	.498	.860	
	N	40	40	40	40	40
**. Correlation is significant at the 0.01 level (2-tailed).						

**Source: Research Findings (2017)**

#### 4.5 Regression Analysis

FDI inflows were regressed against four predictor variables; public debt, economic growth, foreign exchange rates and inflation rates. The study obtained the model summary statistics as shown in table 4.4 below.

**Table 4.4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.527 <sup>a</sup>	.278	.195	32.594	1.942

a. Predictors: (Constant), Inflation rate, Exchange rate, Public Debt,  
Economic Growth

b. Dependent Variable: FDI Inflows

**Source: Research Findings (2017)**

From the outcome in table 4.4 above, the value of R square was 0.278, a discovery that 27.8 percent of the deviations in FDI inflows into the country is caused by changes in public debt, economic growth, exchange rates and inflation rates. Other variables not included in the model justify for 72.2 percent of the variations in FDI inflows to the country. Also, the results revealed that there exists a strong relationship among the selected independent variables and FDI inflows as shown by the correlation coefficient (R) equal to .527. A durbin-watson statistic of 1.942 indicated that the variable residuals were not serially correlated since the value was more than 1.5.

**Table 4.5: Analysis of Variance**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	14306.145	4	3576.536	3.367	.020 <sup>b</sup>
	Residual	37183.630	35	1062.389		
	Total	51489.775	39			

a. Dependent Variable: FDI Inflows

b. Predictors: (Constant), Inflation rate, Exchange rate, Public Debt, Economic Growth

The significance value is 0.020 which is less than  $p=0.05$ . This implies that the model was statistically significant in predicting how public debt, economic growth, exchange rates and inflation rates affect FDI inflows in the country. Given 5% level of significance, critical value from the table is 2.74, table 4.5 above shows computed F value as 3.367. This confirms that overall the multiple regression model is statistically significant, in that it is a suitable prediction model for explaining how public debt, economic growth, exchange rates and inflation rates affects FDI inflows in the country.

**Table 4.6: Model Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1469.182	1747.627		.841	.406
Public Debt	181.743	161.943	1.033	1.122	.269
Economic Growth	-462.938	467.340	-.970	-.991	.329
Exchange rate	1.399	1.328	.385	1.053	.300
Inflation rate	-2.200	1.219	-.276	-1.806	.080

a. Dependent Variable: FDI Inflows

**Source: Research Findings (2017)**

The study applied t-test to determine the significance of individual variables applied in this study as predictors of FDI inflows in the country. The p-value under sig. column was used as an indicator of the significance of the relationship between the dependent and the

independent variables. At 95% confidence level, a p-value of less than 0.05 was interpreted as a measure of statistical significance. As such, a p-value above 0.05 indicates a statistically insignificant relationship between the dependent and the independent variables. The results are as shown in table 4.6

From the above results, it is evident that none of the four selected independent variables is a significant determiner of FDI inflows as shown by p values greater than 0.05.

The following regression equation was estimated:

$$Y = 1469.182 + 181.743X_1 - 462.938X_2 + 1.399X_3 - 2.200X_4$$

Where,

Y = FDI Inflows

X<sub>1</sub> = Public Debt

X<sub>2</sub> = Economic Growth

X<sub>3</sub> = Exchange rates

X<sub>4</sub> = Inflation rates

On the estimated regression model above, the constant = 1469.182 shows that if selected dependent variables (public debt, economic growth, foreign exchange rates and inflation rate) were rated zero, FDI inflows would be 1469.182. A unit increase in public debt would lead to an increase in FDI inflows in the country by 181.743. A unit increase in exchange rates would lead to an increase in FDI inflows in the country by 1.399 while a unit increase in economic growth and inflation would lead to a decrease in FDI inflows in the country by 462.938 and 1.399 respectively.

#### **4.7 Discussion of Research Findings**

The study sought to determine the effect of public debts on FDI inflows in the country. The

independent variable was public debt as measured by total public debt on a quarterly basis. The control variables were economic growth as measured by quarterly GDP, exchange rates as measured by quarterly exchange rate between KES and USD and inflation rates as measured by quarterly CPI. FDI inflows was the dependent variable which the study sought to explain and it was measured by quarterly FDI inflows in Kenya. The effect of each of the independent variables on the dependent variable was analyzed in terms of strength and direction.

The Pearson correlation coefficients between the variables revealed existence of a weak positive correlation between public debt and FDI inflows in Kenya ( $p=.448$ ,  $p>.004$ ). The study also showed that there exist a weak positive correlation between exchange rates and FDI inflows ( $p=.426$ ,  $p>.006$ ). The relationship between economic growth and FDI inflows was found to be weak and positive ( $p=.431$ ,  $p>0.005$ ). This implies that movement in economic growth is positively correlated to FDI inflows and in a significant manner. This shows that exchange rates have a weak positive association with FDI inflows and the association is significant. The relationship between inflation and FDI inflows was found to be weak and negative ( $p=-.252$ ,  $p>0.116$ ). This implies that movement in the inflation rate is negatively correlated to FDI inflows but not in a significant manner.

The model summary revealed that the independent variables: public debt, economic growth, exchange rates and inflation explains 27.8% of changes in the dependent variable as indicated by the value of  $R^2$  which implies that there are other factors not included in this model that account for 72.2% of changes in FDI inflows in Kenya. The model was found to be fit at 95% level of confidence since the F-value of 3.367 is higher than the critical value. This implies that overall the multiple regression model is statistically significant, in that it is a suitable



prediction model for explaining FDI inflows in Kenya.

The findings of this study are in contrast with Azam and Ullah (2011) who examined the impact of public debt on foreign direct investment in Pakistan. The result implied that FDI is negatively influenced by the bad debt conditions of the country and reflects relatively unfavourable foreign investment environment. Their study also concluded that based on the importance of foreign investment, the government needs to pursue such policies both to attract foreign private investment and resolve the issue of external debt through formulating a dynamic and well-structured debt management policy since the growth of FDI inflows is affected by large levels of public debt.

This study is in agreement with Udomkerdmongkol, Gorg and Morrissey (2013) who conducted an empirical investigation on domestic investment, external debt and FDI . The study utilized the model of Marini and Dalmazzo (2000) to predict the relative importance of three different sources of financing: domestic capital self-financing, foreign debt financing and FDI financing, for domestic investment under the two sets of political regimes: politically unstable and politically stable. Based on fixed-effects estimation, the estimation results excluding any political factors are giving positive impact of domestic capital self-financing and FDI financing on domestic investment. No evidence exists on the association between external debt financing and domestic investment in both regimes. The findings show that foreign debt financing have no influence on investment.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter shows the summary of research findings, the conclusions made from the results, and the recommendations for policy and practice. The chapter also discusses a few limitations encountered as well as suggestions for future research.

#### 5.2 Summary of Findings

The study sought to investigate the effect of public debt on FDI inflows in Kenya. The independent variables for the study were interest rates, exchange rates, economic growth and inflation. The study adopted a descriptive research design. Secondary data was obtained from CBK and KNBS and was analyzed using SPSS software version 21. The study used quarterly data covering a period of ten years from January 2007 to December 2016.

From the results of correlation analysis, a weak positive correlation was found to exist between public debt and FDI inflows in Kenya. The relationship between the control variables (economic growth and inflation) and FDI inflows in Kenya was found to be weak and negative while exchange rates had a weak positive relationship with FDI inflows in Kenya. All the independent variables (public debt, economic growth, exchange rates and inflation rates) were found to have a significant relationship with FDI inflows in Kenya as indicated by p values that are more than 0.05.

The co-efficient of determination R-square value was 0.278 which means that about 27.8 percent of the variation in FDI inflows in Kenya can be explained by the four selected independent variables while 72.2 percent in the variation of FDI inflows in Kenya is

associated with other factors not covered in this research. The study also found that the independent variables had a strong correlation with FDI inflows in Kenya ( $R=0.527$ ). ANOVA results show that the F statistic was significant at 5% level with a  $p=3.367$ . Therefore the model was fit to explain the relationship between the selected variables.

The regression results show that when all the selected dependent variables (public debt, economic growth, exchange rates and inflation) are rated zero, FDI inflows in Kenya would be 1469.182. A unit increase in public debt would lead to an increase in FDI inflows in the country by 181.743. A unit increase in exchange rates would lead to an increase in FDI inflows in the country by 1.399 while a unit increase in economic growth and inflation would lead to a decrease in FDI inflows in the country by 462.938 and 1.399 respectively.

### **5.3 Conclusion**

From the study findings, the study concludes that FDI inflows in Kenya have a positive association with public debt. The study therefore concludes that higher public debt lead to improved FDI inflows in the country even though not to a significant extent. Exchange rates were also found to be positively related to FDI inflows in the country. and therefore an increase in exchange rates leads to an increase in FDI inflows in the energy and petroleum industry. The study found that inflation rate and economic growth had a negative correlation with FDI inflows in the country and we can therefore conclude that higher inflation rates and economic growth tend to discourage foreign direct investment inflows in Kenya.

This study concludes that independent variables selected for the study public debt, economic growth, exchange rates and inflation influence FDI inflows in the country to a significant extent as they account for 27.8 percent of the changes in FDI inflows in the country. The fact that the four independent variables explain 27.8% of changes in FDI inflows in Kenya imply

that the variables not included in the model explain 72.2% of changes in FDI inflows in the country. The overall model was found to be significant as explained by the F statistic. It is therefore sufficient to conclude that these variables significantly influence FDI inflows in the country as shown by the p-value in ANOVA summary.

This finding concurs with Udomkerdmongkol, Gorg and Morrissey (2013) who conducted an empirical investigation on domestic investment, FDI and external debt. The study utilized the model of Dalmazzo and Marini (2000) to generate predictions on the relative significance of three different sources of financing: domestic capital self-financing, FDI financing and foreign debt financing, for domestic investment under two types of political regimes: politically unstable and politically stable. Based on fixed-effects estimation, the estimation results excluding any political factors are giving positive effects of domestic capital self-financing and FDI financing on domestic investment. There is no evidence for a relationship of external debt financing and domestic investment in both regimes. The results suggest that foreign debt financing has no effect on the investment.

#### **5.4 Recommendations**

The study established that although there is a positive influence of public debt on FDI inflows in the country, the influence is not statistically significant. This study recommends that there is need for policy makers to regulate the debt levels prevailing in the country bearing in mind that they influence FDI inflows in the country.

The study found that exchange rates have a positive influence on FDI inflows in the country. This study recommends that policy makers should regulate prevailing exchange rates as depreciation in exchange rates may lead to decreased FDI inflows into the country. Economic growth and inflation rates were found to have a negative relationship with FDI inflows in the

country. The variables were however found to be insignificant determinants of FDI inflows in the country. This study recommends that policy makers should pay attention to the prevailing rates of these selected independent variables as they can negatively affect FDI inflows in the country.

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

The scope of this research was for ten years 2007-2016. It has not been determined if the results would hold for a longer study period. Furthermore it is uncertain whether similar findings would result beyond 2016. A longer study period is more reliable as it will take into account major economic conditions such as booms and recessions.

One of the limitations of the study is the quality of the data. It is difficult to conclude from this research whether the findings present the true facts about the situation. The data that has been used is only assumed to be accurate. The measures used may keep on varying from one year to another subject to prevailing condition. The study utilized secondary data, which had already been obtained and was in the public domain, unlike the primary data which is first-hand information. The study also considered selected determinants and not all factors affecting FDI inflows mainly due to limitation of data availability.

For data analysis purposes, the researcher applied a multiple linear regression model. Due to the shortcomings involved when using regression models such as erroneous and misleading results when the variable values change, the researcher cannot be able to generalize the findings with certainty. If more and more data is added to the functional regression model, the hypothesized relationship between two or more variables may not hold.

## **5.6 Suggestions for Further Research**

This study focused on public debt and FDI inflows in Kenya and relied on secondary data. A research study where data collection relies on primary data i.e. in-depth questionnaires and interviews covering the different sectors that receive FDI is recommended so as to complement this research.

The study was not exhaustive of the independent variables affecting FDI inflows in Kenya and this study recommends that further studies be conducted to incorporate other variables like money supply, interest rates, cost of labour, technological advancement, education levels, political stability and other macroeconomic variables. Establishing the effect of each variable on FDI inflows will enable policy makers know what tool to use when controlling FDI inflows.

The study concentrated on the last ten years since it was the most recent data available. Future studies may use a range of many years e.g. from 1970 to date and this can be helpful to confirm or disapprove the findings of this study. The study limited itself by focusing in Kenya. The recommendations of this study are that further studies be conducted on other contexts such as other East Africa countries. Finally, due to the shortcomings of regression models, other models such as the Vector Error Correction Model (VECM) can be used to explain the various relationships between the variables.

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