

**THE RELATIONSHIP BETWEEN PUBLIC DEBT AND FOREIGN DIRECT
INVESTMENTS IN KENYA**

BY

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DECLARATION

This Research Project is my original work and has not been presented in any other University.

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DEDICATION

I dedicate this study to my family; my wife Hellen, Children Kelvin, Michelle and Valerie for their constant encouragement and patience throughout my academic period.

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LIST OF ABBREVIATIONS AND ACRONYMS

ADF:	Augmented Dickey Fuller
ANOVA:	Analysis of Variance
CBK:	Central Bank of Kenya
CPI:	Consumer Price Index
FDI:	Foreign Direct Investment
GDP:	Growth Domestic Product
HIPCs:	Highly Indebted Poor Countries
KES:	Kenya Shillings
LDCs:	Less Developing Countries
LICs:	Low-Income Countries
MOF:	Ministry of Finance
SPSS:	Statistical Package for Social Sciences
VECM:	Vector Error Correction Model

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ABSTRACT

Public debt is one of the main macroeconomic indicators, which forms countries' image in international markets. Public debt remains one of the major economic policy issues confronting the governments of poor countries globally because the debt levels. Debt sourced finance represents funds with fixed contractual obligations which will require pledging future resources of the nation as collateral. This study sought to establish the relationship between public debt and foreign direct investments in Kenya. Descriptive research design was used as it seeks to explain the the relationship between public debt and foreign direct investments in Kenya. Secondary data was used for analysis. Data collected was analyzed using descriptive measures of central tendency including means, standard deviation, skewness, kurtosis, and the multiple regression analysis. The study findings revealed that a relationship exists between foreign debt and domestic debt and the foreign direct investment in the study period as shown by the model summary. A positive relationship was observed between foreign debt and FDI. Domestic debt also had a positive impact on FDI as indicated by the positive beta co-efficient with FDI. Foreign debt had the greatest influence on FDI as shown by the high beta co-efficient. The variable was the second in influencing FDI in the country in the study period. Domestic debt had a moderately strong co-relation with the FDI. These findings therefore warranted that the study variables had an effect on FDI. The regression results further indicated that the relationships were significant since all the significance values were less than the preset significance. The GDP however had the least influence on the FDI as indicated by the small beta co-efficient. Consequently, the GDP had a weak positive co-relation with FDI. Therefore, GDP has a positive impact on the FDI levels in the country. The independent variables in the study were significant since their significance values were less than the preset significance level. The findings recommend that the government policy makers need to push reform agenda on public debt so as to attract more FDI in the Kenyan economy since a higher investor's confidence in domestic market acts as a stimulus in attracting FDI inflows.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Public debt is one of the main macroeconomic indicators, which forms countries' image in international markets (Abbas & Christensen, 2007). It is one of the inward foreign direct investment flow determinants. 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). Moreover, since governments borrow mainly by issuing securities, their term, interest rates and overall costs of debt financing has significant impact on the economy, future of the enterprises and social welfare for not only present, but also future generations. According to Martin (2009), public debt can also serve as means of delaying taxation thereby reducing current distortions.

Public debt remains one of the major economic policy issues confronting the governments of poor countries globally because the debt levels, particularly among the Highly Indebted Poor Countries (HIPCs), and Low-Income Countries (LICs) generally, have for a long time raised major concerns among international financial institutions and bilateral lenders, resulting in several initiatives from the developed countries and from the international financial institutions to ease the debt burden that was threatening to cripple the economies of HIPCs (Adofu & Abula, 2010). The initiatives range from measures to ease the debt burden through debt rescheduling to outright debt forgiveness.

Large public debt which refers to a total of both external and domestic has been the most critical economic crisis faced by a majority of the developing countries since their political independence after the World War II (Ribeiro, Vaicekauskas & Lakštutienė, 2012).

The study will be anchored on two theories: industrial organization and internalization theories and the Neoclassical Theory. Industrial organization and internalization theories assume that foreign companies have oligopolistic power in the host countries (Meier, 1994). It holds micro and macro-economic factors responsible for the real life deviations from the perfect market model. 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). 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.

1.1.1 Public Debt

Public debt refers to the total of the nation's debts which covers debts of local and state and national governments indicating how much public spending is financed by borrowing

instead of taxation (Makau, 2008). Government debt is one method of financing government operations, though not the only method as Governments can also create money to monetize their debts, thereby removing the need to pay interest (Martin, 2009). But this practice simply reduces government interest costs rather than truly canceling government debt and can result in hyperinflation if used unsparingly (Ribeiro, Vaicekauskas & Lakstutiene, 2012). Domestic debt is created through various instruments including bonds, treasury bills, borrowing from commercial banks and overdraft from the Central Bank while Foreign debt comprise bilateral and multilateral loans, suppliers credit and loans from foreign commercial banks.

Ariyo (1997) noted that a fundamental factor causing debt to rise is the reliance on external resources to complement capital formation in the domestic economy. The higher the interest payment and the heavier the deficit on the current account, the heavier the debt burden. Debt sourced finance represents funds with fixed contractual obligations which will require pledging future resources of the nation as collateral (Klein, 1994). In order to cope adequately in the long run, with servicing requirement, a nation's debt service capacity must grow at a rate higher than that of its financial risk exposure. The non-debt resources on the other hand represent funds flow without fixed or compulsory servicing obligations on the government. The magnitude and regularity of such resources however, depend on foreign investors' perception of the investment environment in the recipient country.

1.1.2 Foreign Direct Investment

Foreign direct investment (FDI) is a kind of investment in which the investor country directly invests on the assets and resources of the host country (Ostadi & Ashja, 2014). FDI is important to the future development of every country especially African nations, as it is a means of increasing the capital available for investment and the economic growth needed to reduce poverty and raise living standards in any given country (UNCTAD, 2008). It plays a vital role in the up gradation of technology, skills and managerial capabilities in various sector of the economy that would be difficult to generate 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 (Maitena, 2003).

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 (Ribeiro, Vaicekauskas & Lakstutiene, 2012). FDI in Kenya is defined as investment in foreign assets, such as foreign currency, credits, rights, benefits or property, undertaken by a foreign national (a non-Kenyan citizen) for the purposes of production of goods and services which are to be sold either domestically or exported overseas (Investment Promotion Centre Act, Chapter 518). FDI is important for developing countries as it makes available the resources that could bring about an optimal level of economic development (Imimole & Imoughele, 2010). This is because their economies are plagued with problems associated with low domestic savings, low tax revenue, low productivity and limited foreign exchange earnings.

1.1.3 The relationship between Public Debt and Foreign Direct Investment

Ostadi and Ashja (2014) shows that external debts have significant negative effect on foreign direct investment, and increasing foreign debt has destroyed foreign investor's vision and created negative expectations of the future economy which together reduced investment in the country. The results 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. Wamboye (2012) studied external debt, trade and FDI on economic growth of least developed countries. The study findings suggest that high external debt depresses economic growth, regardless of the nature of the debt.

According to Schnitzer (2000), the sovereign risks associated with debt finance are shown to be generally less severe than the ones that come with FDI. Therefore, FDI is chosen only if the investor is more efficient in running the project in question, if the project is risky, and if the foreign investor has a good outside option which deters 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 domestic investment, FDI and external debt. The results suggest that foreign debt financing has no effect on the investment. There is no evidence for a relationship of external debt financing and domestic investment in both regimes.

1.1.4 Public Debt in Kenya

The Internal Loans Act (Cap 420) provides the legal framework for the Minister for Finance (cabinet secretary to National Treasury) to borrow on behalf of the government from the domestic market through issuance of Treasury bills and Treasury bonds. The government overdraft at the Central Bank of Kenya is the only aspect of domestic debt borrowing that seems to be limited by law. Domestic borrowing through Treasury bills and bonds do not seem to have a limit in law. This is different from external borrowing where the External Loans and Credit Act, CAP. 422 of the laws of Kenya limits the total indebtedness in respect of principal amount to Ksh 500 billion or such higher sum as the National Assembly may by resolution approve. Despite the lack of legal limit on domestic borrowing, the Minister in charge of National Treasury is required by provisions of the Internal Loans Act to “report to the National Assembly in writing, the amount of indebtedness outstanding at the end of each financial year in respect of each manner of borrowing specified in section 3” of the Internal Loans Act (Muinga, 2014)

From statistics, public debts had grown continuously from the financial year 2002/2003; public debt amounted to 65.97% of the GDP. The debts increased gradually to 67.54% in 2003/2004 followed by a decrease to 63.78% in the fiscal year 2004/2005. Public debt in 2005/2006 financial year was 63.15% which is a decrease compared to the previous year. In 2006/2007 fiscal year, public debts amounted to 59.94% and increased to 64.14% in 2007/2008, and then further increased to 73.03% in 2008/2009. Over the rest of the study period, the Public debts kept on increasing at an alarming rate whereby in 2009/2010 it

was 76.82% which further increased to 86.85% in 2010/2011 and then to 130.51% of the GDP in 2011/2012 (Matiti, 2013).

External Debt in Kenya increased to 1381.16 KES Billion in May 2015 from 1326.84 KES Billion in April of 2015. External Debt in Kenya averaged 567.03 KES Billion from 2000 until 2015, reaching an all time high of 1381.16 KES Billion in May of 2015 and a record low of 361.73 KES Billion in May of 2003. External Debt in Kenya is reported by the Central Bank of Kenya (Muinga 2014)

In the 1980s and the years preceding, Kenya was among the major aid recipients in Africa, largely to put up infrastructure so as to integrate the large rural economy into the then emerging import substitution Kenyan economy (Putunoi & Mutuku, 2013). The 1990s witnessed a steady decline in development assistance to Kenya occasioned by a perception of poor governance and mismanagement of public resources and development assistance. Other factors include the end of the cold war and the collapse of the Soviet Union. These led to a debt crisis in the country in the early 1990s which turned Kenya into a highly indebted nation. The debt problem was exacerbated by macroeconomic mismanagement in the 1990s such as the Goldenberg scandal which fleeced Kenyans billions of shillings leading to a reduction of donor inflows. The government thus resorted to occasional debt rescheduling and expensive short-term domestic borrowing to finance its expenditures. The details of Kenya's debt burden continue to be disheartening, as of August 2008 the public debt stood at Kshs 867 billion in a country with a population of 36 million people with numerous challenges. Debt composition in government securities since 2003 has been skewed in favour of long term borrowing

through Treasury bonds. Interest rates within the period were sticky below 13% (Putunoi & Mutuku, 2013).

1.2 Research Problem

The biggest constraint facing LDCs to achieve sustained and equitable economic growth and development is lack of domestic financial resources. As a result, many LDCs rely heavily on external capitals such as foreign direct investment, foreign aid, concessional lending and remittances. One consequent of this foreign capital dependency has been an accumulation of a high 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.

Several studies have been conducted on foreign direct investment and government debt. For instance, Borensztein (1990) finds evidence for the simple notion that increasing foreign debt stock leads to domestic investment falling by analyzing the Philippines over 1970-90 period. Neumann (2003) puts forward a different argument for domestic investment and FDI interaction by adding international debt. According to Schnitzer (2000), the sovereign risks associated with debt finance are shown to be generally less severe than the ones that come with FDI. Ostadi and Ashja (2014) show that external debts have significant negative effect on foreign direct investment, and increasing foreign

debt has destroyed foreign investors' vision and has created negative expectations of the future economic situation which together reduced investment in the country.

Locally, existing studies have either considered public debt or FDI separately. Chironga (2003) examined the structure, magnitude, level, and determinants of public domestic debt in Kenya for the period 1990-2001. The study established that the increment in public domestic debt over the period under study could be attributed to a number of factors including; diminishing inflow of external grants and concessional loans, use of government securities to mop up excess money supply following the excessive liquidity released in the economy in 1992 and 1993, frequent net repayments of external debt, budgetary support to inefficient parastatals, loose fiscal policy, and the need to sterilize large short-term capital inflows attracted by the high interest rates. Makau (2008) did an empirical analysis on the external public debt servicing and economic growth in Kenya. The empirical results in the short run estimated model indicated that the coefficients of external debt to GDP, savings to GDP and debt service to GDP had the correct sign and significant while the coefficients of interest to GDP and growth in labour force were insignificant. Kibui (2009) studied the impact of external debt on public investment and economic growth in Kenya (1970-2007). The results indicate that debt relief could act as a catalyst for investment recovery and economic growth in Kenya.

Harmon (2012) looked at the impact of public debt on inflation, GDP growth and Interest rates in Kenya. The study concluded that the public debt, inflation, GDP growth and Interest rates link could not be found in a single analysis. Gikandu (2012) did a study on the relationship between domestic debt and economic growth in Kenya. The analysis

performed revealed a weak positive relationship between the two variables. This means that the use of domestic debt has some slight contribution to economic growth.. Matiti (2013) examined the effect of selected determinants on public debt in Kenya and established a direct relationship between foreign exchange rates depreciation and public debts.

Borensztein (1990) finds evidence for the simple notion that increasing foreign debt stock leads to domestic investment falling by analyzing the Philippines over 1970-90 period. Neumann (2003) puts forward a different argument for domestic investment and FDI interaction by adding international debt. According to Schnitzer (2000), the sovereign risks associated with debt finance are shown to be generally less severe than the ones that come with FDI. Ostadi and Ashja (2014) shows that external debts have significant negative effect on foreign direct investment, and increasing foreign debt has destroyed foreign investor's vision and created negative expectations of the future economy which together reduced investment in the country.

Moki (2012) did an analysis of the relationship between public debt and economic growth in Africa and established that public debt has a significant positive relationship on economic growth. However, there is no study that has concentrated on the relationship between public debt and foreign direct investments in Kenya. This study therefore sought to answer one research question: What is the relationship between public debt and foreign direct investments in Kenya?

1.3 Research Objective

The objective of the study was to determine the relationship between public debt and foreign direct investments in Kenya.

1.4 Value of the Study

To scholars and academicians, this study would increase body of knowledge to the scholars of the relationship between public debt and foreign direct investments in Kenya. It would also suggest areas for further research so that future scholars can pick up these areas and study further to enhance the body of knowledge.

The study would be important to the government especially the National Treasury for making policy decisions. Through the findings of this study, the Government would learn how to develop appropriate policies to attract the right quantities of FDI in the achievement of its goals.

Finally, foreign investors in Kenya would find the research findings relevant in informing their decision making processes especially on where to take their international investments for optimal return. This would help the investors to make decisions on when and where to invest in.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, the study reviews literature by different scholars that focuses on the relationship between public debt and foreign direct investment. First, it briefly reviews the theoretical models that form the foundation of the study. The chapter then proceeds to present empirical studies guiding this study and chapter summary.

2.2 Review of Theories

This section discusses the various theories on which the study is grounded. It specifically presents the Keynesian Theory of Economics; the Industrial Organization and Internalization Theories; and the Neoclassical Theory. These theories are discussed in details below:

2.2.1 Keynesian Theory of Economics

This theory developed as a result of Keynesian economics exemplified by, for instance, Rostow (1961) whose concern was how to transform what is perceived as backward areas and unproductive societies into dynamic and growing economies (Cockcroft & Riddell, 1991). 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 (Cockcroft & Riddell, 1991). 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, 1998).

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, then both parties will gain. If there are under-utilized 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). This theory explains the way openness of the economy improves the level of FDI. Foreign investors are always attracted to an economy that has well developed infrastructure and stable political conditions. These are necessary determinants in attracting FDI which is the key variable of the study.

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). This theory explains the relationship between labour costs and productivity, economic growth and market size. In determination of foreign markets attractiveness, foreign investors look at the viability of the market which is measured in terms of openness. They also look at how much it would cost them to produce for the market and the final price they would charge so as to determine their margin. These factors form key determinants of FDI in an economy.

2.2.3 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). This theory

explains the influence of taxation and how they can be applied by governments to attract foreign direct investment. They also explain the labour costs and productions which are key determinants of FDI flows.

2.3 Determinants of Foreign Direct Investment

There are many determinants often cited in the econometric studies as the determinants of FDI.

2.3.1 Market Size

According to Artige and Nicolini (2005) market size as measured by GDP or GDP per capita seems to be the most robust FDI determinant. This is the main determinant for horizontal FDI and it is irrelevant for vertical FDI. Jordaan (2004) mentions that FDI will move to countries with larger and expanding markets and greater purchasing power, where firms can potentially receive a higher return on their capital and by implication receive higher profit from their investments.

According to Charkrabarti (2001), the market-size hypothesis supports an idea that a large market is required for efficient utilization of resources and exploitation of economies of scale: as the market-size grows to some critical value, FDI will start to increase thereafter with its further expansion. This hypothesis has been quite popular and a variable representing the size of the host country market has come out as an explanatory variable in nearly all empirical studies on the determinants of FDI. In ODI (1997), it is stated that econometric studies comparing a cross section of countries point to a well-established correlation between FDI and the size of the market, which is a proxy for the size of GDP, as well as some of its characteristics, such as average income levels and

growth rates. Some studies found GDP growth rate to be a significant explanatory variable, whereas GDP was not, probably indicating that where the current size of national income is very small, increases may have less relevance to FDI decisions than growth performance, as an indicator of market potential.

2.3.2 Openness

Charkrabarti (2001) states that since most investment projects are directed towards the tradable sector, a country's degree of openness to international trade should be a relevant factor in the decision. Jordaan (2004) claims that the openness impact on FDI is dependent on investment type. When investments are market-seeking, trade restrictions (and therefore less openness) can have a positive impact on FDI. The reason stems from the "tariff jumping" hypothesis, which argues that foreign firms that seek to serve local markets may decide to set up subsidiaries in the host country if it is difficult to import their products to the country.

In contrast, multinational firms engaged in export-oriented investments may prefer to invest in a more open economy since increased imperfections that accompany trade protection generally imply higher transaction costs associated with exporting. Wheeler and Mody (1992) observe a strong positive support for the hypothesis in the manufacturing sector, but a weak negative link in the electronic sector. Kravis and Lipsey (1982), Culem (1988), Edwards (1990) find a strong positive effect of openness on FDI and Schmitz and Bieri (1972) obtain a weak positive link. Parletun (2008) finds that trade openness is positive but statistically significant from zero.

2.3.3 Labour Costs and Productivity

Wage as an indicator of labour cost has been the most contentious of all the potential determinants of FDI. Theoretically, the importance of cheap labour in attracting multinationals is agreed upon by the proponents of the dependency hypothesis as well as those of the modernization hypothesis, though with very different implications (Charkrabarti, 2001). There is, however, no unanimity even among the comparatively small number of studies that have explored the role of wage in affecting FDI: results range from higher host country wages discouraging inbound FDI to having no significant effect or even a positive association.

There is no unanimity in the studies regarding the role of wages in attracting FDI. Shamsuddin (1994) demonstrate that higher wages discourage FDI. Tsai (1994) obtains strong support for the cheap-labour hypothesis over the period 1983 to 1986, but weak support from 1975 to 1978. In ODI (1997), it is stated that empirical research has also found relative labour costs to be statistically significant, particularly for foreign investment in labour-intensive industries and for export-oriented subsidiaries. However, when the cost of labour is relatively insignificant (when wage rates vary little from country to country), the skills of the labour force are expected to have an impact on decisions about FDI location.

2.3.4 Political Risk

According to ODI (1997), where the host country owns rich natural resources, no further incentive may be required, as it is seen in politically unstable countries. In general, as long as the foreign company is confident of being able to operate profitably without

excessive risk to its capital and personnel, it will continue to invest. For example, large mining companies overcome some of the political risks by investing in their own infrastructure maintenance and their own security forces. Moreover, these companies are limited neither by small local markets nor by exchange-rate risks since they tend to sell almost exclusively on the international market at hard currency prices. Specific proxy variables have proved significant in some studies; but these quantitative estimates can capture only some aspects of the qualitative nature of political risk.

Hausmann and Fernandez-Arias (2000) find no relationship between FDI flows and political risk while Schneider and Frey (1985) find an inverse relationship between the two variables. Using data on U.S. FDI for two time periods, Loree and Guisinger (1995) found that political risk had a negative impact on FDI in 1982 but no effect in 1977. Edwards (1990) uses two indices, namely political instability and political violence, to measure political risk. Political instability (which measures the probability of a change of government) was found to be significant, while political violence in terms of the frequency of political assassinations, violent riots and politically motivated strikes was found to be insignificant.

2.3.5 Infrastructure

Infrastructure covers many dimensions ranging from roads, ports, railways and telecommunication systems to institutional development like accounting, legal services. According to ODI (1997), poor infrastructure can be seen, however, as both an obstacle and an opportunity for foreign investment. For the majority of low-income countries, it is often cited as one of the major constraints. But foreign investors also point to the

potential for attracting significant FDI if host governments permit more substantial foreign participation in the infrastructure sector.

Jordaan (2004) claims that good quality and well-developed infrastructure increases the productivity potential of investments in a country and therefore stimulates FDI flows towards the country. According to Asiedu (2002) and Ancharaz (2003), the number of telephones per 1,000 inhabitants is a standard measurement in the literature for infrastructure development. However, according to Asiedu (2002), this measure falls short, because it only captures the availability and not the reliability of the infrastructure. Furthermore, it only includes fixed-line infrastructure and not cellular (mobile) telephones.

2.3.6 Economic Growth

The role of growth in attracting FDI has also been the subject of controversy. Charkrabarti (2001) states that the growth hypothesis developed by Lim (1983) maintains that a rapidly growing economy provides relatively better opportunities for making profits than the ones growing slowly or not growing at all. Lunn (1980), Schneider and Frey (1985) and Culem (1988) find a significantly positive effect of growth on FDI, while Tsai (1994) obtains a strong support for the hypothesis over the period 1983 to 1986, but only a weak link from 1975 to 1978.

On the other hand, Nigh (1985) reports a weak positive correlation for the less developed economies and a weak negative correlation for the developed countries. Ancharaz (2003) finds a positive effect with lagged growth for the full sample and for the non-Sub-Saharan African countries, but an insignificant effect for the Sub-Saharan Africa sample.

Gastanaga et al. (1998) and Schneider and Frey (1985) found positive significant effects of growth on FDI.

2.3.7 Tax

The literature remains fairly indecisive regarding whether FDI may be sensitive to tax incentives. Some studies have shown that host country corporate taxes have a significant negative effect on FDI flows. Others have reported that taxes do not have a significant effect on FDI.

The direction of the effects of above mentioned determinants on FDI may be different. A variable may affect FDI both positively and negatively. For example, factors, such as labour costs, trade barriers, trade balance, exchange rate and tax have been found to have both negative and positive effects on FDI. In the empirical studies a various combination of these determinants as explanatory variables have been used. Moosa (2005) states that due to the absence of a consensus on a theoretical framework to guide empirical work on FDI, there is no widely accepted set of explanatory variables that can be regarded as the “true” determinants of FDI.

2.4 Empirical Review

This section highlights studies previously done on public debt both domestic and foreign and their effects on foreign direct investments and the overall economic growth. The methodologies, the types of data used and the research findings of such studies are presented in this section.

2.4.1 International Evidence

Wamboye (2012) studied external debt, trade and FDI on economic growth of least developed countries. Arellano-Bond SGMM method was used on unbalanced panel data spanning from 1975 to 2010. A comparative analysis based on different debt specifications and samples was provided. Overall, the study findings suggest that high external debt depresses economic growth, regardless of the nature of the debt. Furthermore, debt relief initiatives are crucial as evidenced in the lower negative debt effects on growth in HIPCs sub-sample relative to non-HIPCs. Additionally, trade, initial values of FDI and official development assistance matter in economic growth of LDCs.

Udomkerdmongkol, Gorg and Morrissey (2013) 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.

Basit and Ansari (2015) examined role of foreign investment and external debt in determination of exchange rate in Pakistan. Ordinary least square and exact maximum likelihood method were performed for the estimation of regression models. In Ordinary

least square method, cost of debt and exchange rate has the inverse and significant relation. Foreign investment has the positive and significant relationship with exchange rate in all models. International oil price has no significant relationship with the exchange rate of Pakistan. The study concluded that cost of debt and cost of foreign investment has the significant relationship. Cost of debt has the inverse relation with the exchange rate and cost of foreign investment has the direct relationship with the exchange rate.

Agbo (2012) examined the impact of foreign direct investment on economic growth in Nigeria within the period 1986-2007. The study employed multiple regression models to determine the impact of some external or macro variables on the gross domestic product (GDP) proxy for economic growth in Nigeria. The study used time series data to ascertain the inflow of FDI to the Nigerian economy and its implications on economic growth. The study found that FDI has the potential to positively impact upon the economy though its contribution to GDP was very low within the period under review. The multiple regression results also revealed that FDI, government tax revenue (GTR) and savings exerted positive but not significant impact, except savings, on GDP during the study period. However, foreign exchange and public expenditure on education (PEE) had inverse relationship with GDP.

Ajisafe, Nassar, Fatokun, Soile and Gidado (2006) examined external debt and foreign private investment in Nigeria by carrying out a test for causality between 1970 and 2003. The variables used were tested for stationarity using the Augmented Dickey Fuller and Philip Perron test. The result shows that the variables are stationary at first differencing. Co-integration test was also performed and the result shows that the variables are not

related in the long run using the likelihood ratio as a measure of significance. The result of the co-integration determines the use of vector autoregressive model to test for causality, which resulted in a bi-directional relationship between external debt and foreign private investment in Nigeria.

Desai, Foley and Hines Jr (2005) examined foreign direct investment and the domestic capital stock. The study concluded that although it has been natural to assume that foreign investment comes at the expense of domestic investment, new evidence from analyses of American multinational firms suggests instead that greater foreign investment is associated with higher levels of domestic investment. This effect is consistent with cross sectional evidence that firms whose foreign operations expand simultaneously expand their domestic operations, and suggests that interpretation of the OECD cross sectional evidence may be confounded by omitted variables.

Azam and Ullah (2011) examined the Impact of public debt on foreign direct investment in Pakistan. The result implied that FDI is negatively affected by the country's bad debt condition and signifies a relatively unfavorable environment for foreign investment. Their study further concluded that on the basis of the importance of foreign investment, the government not only needs to pursue such policies to attract foreign private investment, but also external debt should be resolved and administered through dynamic and proper debt management policy because growing public debt discourages FDI inflows.

Oke & Sulaiman (2012) examined the impact of external debt on the level of economic growth and the volume of investment in Nigeria between 1980 and 2008. The study

adopted the Debt Cum-Growth model along with the Investment model while the econometrics analysis techniques of multiple regressions were employed. The result of the analysis indicates that there exists a positive relationship between external debt, economic growth and Investment; this was confirmed by the coefficient of determination (R^2) of about 79.8%.

Amassoma and Ogbuagu (2014) examined FDI, private investment and public investment in Nigeria using an unraveled dynamic relation. The study sought to verify the interactions and transmission mechanism between FDI, private direct investment and public direct investment in Nigeria. Furthermore, these variables were examined to ascertain their direction of causality and whether or not they have long run linear relationship. Also, the impulse responses of these variables to shocks in the extraneous variables were verified; using the Multiple-Equation VAR models with time series data ranging from 1970-2012. The co integration result indicates that there is no long run relationship between these variables.

Ribeiro, Vaicekauskas and Lakstutiene (2012), undertook research on the effect of public debt and other determinants on the economic growth of selected European countries. The findings of this research confirmed that the public debt level may have a significant impact on GDP, something which is worrying as in some cases it has a negative impact. In this research, private debt and private credit flow have positive effects on the economy for every country, suggesting that private borrowing is more efficient than public borrowing. Openness of the economy and inward foreign direct investment also have

varying effects on GDP, resulting from different characteristics of the countries researched.

2.4.2 Local Evidence

Harmon (2012) studied the impact of public debt on inflation, GDP growth and Interest rates in Kenya by looking at the impact of public debt on the major economic indicators like Inflation, GDP growth and Interest rates) in Kenya. The study drew upon secondary data on the mentioned variables by the government of Kenya covering the period 1996-2011. Findings from these studies vary across variables. Some studies show positive relationships, others negative relationships while others show no relationships at all. using three simple linear regression models, the study finds that there is a weak positive relationship on the public debt inflation GDP growth link with the public debt GDP growth link being the highest. A negative strong relationship is observed alone the public debt interest rates link. On a general note, the study concludes that the Public Debt Inflation GDP growth Interest rates link cannot be found in a single analysis. The relationship varies across variables. While other variables show a weak relationship others portray a strong one. For instance, of the variables compared in this study public debt and interest rates show the strongest relationship.

Gikandu (2012) did a study on the relationship between domestic debt and economic growth in Kenya. The study sought to establish whether there existed a relationship between domestic debt and economic growth in Kenya. The study utilized data on volume of domestic debt as well as domestic debt by instrument, real GDP and real GDP growth, for a twelve year period from 1999/2000 to 2010/2011 financial years to

establish the relationship between the two variables. The research methodology adopted was descriptive design with use of secondary data from the CBK, MOF and annual economic surveys. The analysis of data was done using Spearman's rank correlation to establish the relationship that exists between domestic debt and economic growth in Kenya. The results are presented in tables and graphs. The analysis performed revealed a weak positive relationship between the two variables. This means that the use of domestic debt has some slight contribution to economic growth. The study recommends that though the relationship is positive, the government needs to use domestic debt with care so that the interest bill therein does not have a negative impact on economic growth.

Nganga and Abala (2013) examined foreign direct investment and its linkages to international trade in Kenya. The study concentrated on finding out whether inflows of FDI cause exports to be greater than they would be otherwise or whether expanding exports attract increased FDI. The objective of the study was to investigate the linkage between FDI and international trade. The study reviewed literature from various sources and established that there could be no question that foreign direct investment and international trade generally were mutually supportive, and that together they were playing the central role in the ongoing integration of the world economy. Through investment and trade, firms in each country are able to specialize in producing what they can produce most efficiently. Trade facilitates this process by allowing an economy to specialize in production and then to exchange part of that output abroad in order to achieve the particular mix of goods and services its citizens want to consume. FDI facilitates this process by increasing the international mobility and hence the efficient use

of the world's supplies of capital and technology, including organizational, managerial and marketing skills.

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.

Kimtai (2014) examined public debt, tax revenue and government expenditure in Kenya: 1960-2012. This study utilized the present value borrowing constraint (PVBC) to study the relationship between public debt, tax revenue and government expenditure in Kenya, for 1960-2011. Annual time series data for total public debt, tax revenue and government expenditure were converted into their respective real values by dividing their respective nominal values by the Consumer Price Index (CPI). Data was collected from Kenya economic surveys from 1960-2013. Augmented Dickey Fuller (ADF) and Philips Perron unit root tests were employed to establish the stationary properties of the series while the Johansen and Juselius co-integration techniques were used to determine presence of linear long run economic relationships in the series. Because co-integrating relationships invalidated ordinary estimation techniques, to achieve these relationships, which formed

the objectives of the study, data was analyzed using vector error correction model (VECM) with correlation analysis. The study found that public debt responds to both tax revenue and government expenditure particularly in the long run. There was strong positive correlation between public debt tax revenue and government expenditure and all correlation coefficients were statistically significant.

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.

Mukui (2013) examined the effect of external public debt on economic growth in Kenya. High levels of external debt in Kenya poses great challenges on the economy because large proportion of exports is devoted in servicing these debts instead of being put into domestic investment thus reducing the prospects of economic growth. The conventional view is that high levels of debt may lead to crowding out effect and also constrain the

scope of counter cyclical fiscal policies which may result in higher volatility and this may adversely affect the economic performance. The study used a linear model to analyze Kenyan data from 1980 to 2011 with GDP growth rate as a function of external debt. Foreign direct investment, labor force, capital formation, domestic saving, inflation and external debt service are taken as control variables. The result indicates that external debt and, debt servicing have negative effects on economic growth. Other factors found to affect growth negatively include, inflation, labor force and domestic savings. Capital formation and foreign direct investment as also supported in the literature have positive effects on economic growth.

2.5 Summary of the Empirical Review

The empirical review has posted mixed reactions as regards the relationship between public debt and FDI. Wamboye (2012) findings suggest that high external debt depresses economic growth, regardless of the nature of the debt. Nganga and Abala (2013) concentrated on finding out whether inflows of FDI cause exports to be greater than they would be otherwise or whether expanding exports attract increased FDI. Harmon (2012) finds out that there is a weak positive relationship on the public debt inflation GDP growth link with the public debt GDP growth link being the highest. Gikandu (2012) revealed a weak positive relationship between the two variables. This means that the use of domestic debt has some slight contribution to economic growth. Matiti (2013) established that debts and exchange rates had been increasing; grants had been decreasing over years, while budget deficits remained high in the country. Kimtai (2014) found that public debt responds to both tax revenue and government expenditure particularly in the long run. Muinga (2014) indicate that external debt and interest payments on external

debt payments contribute negatively to economic growth in Kenya. Mukui (2013) result indicates that external debt and, debt servicing have negative effects on economic growth. From these studies, no study has concentrated on the relationship between public debt and FDI in Kenya. This is the gap that this study will seek to fill.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out various steps that were followed in completing the study. It explains how research is going to be executed and how data was collected and analyzed. The section specifically covers; research design, target population, data collection and data analysis.

3.2 Research Design

This study made use of descriptive study design. A descriptive study attempts to describe or define a subject, often by creating a profile of a group of problems, people, or events, through the collection of data and tabulation of the frequencies on research variables or their interaction as indicated by Cooper and Schindler (2003). Descriptive research is more rigid than an exploratory research and seeks to describe the uses of a product, determine the proportion of the population that uses a product, or predict future demand for a product.

This study choose descriptive as its design because it seeks to explain the the relationship between public debt and foreign direct investments in Kenya. Orodho (2002) notes that the choice of the descriptive survey research design is made based on the fact that in the study, the research is interested on the state of affairs already existing in the field and no variable will be manipulated. This study used a case studies of Kenya hence no population and sampling.

3.3 Data Collection

The study used secondary data from the Kenya National Bureau of Statistics and the Central Bank of Kenya. The data was collected using data collection sheet which were edited, coded and cleaned. This study used secondary data collected from the Kenya National Bureau of Statistics for the past 15years 2000-2014. The study used quarterly data.

3.4 Data Analysis

Data collected were analyzed using descriptive measures of central tendency including means, minimum, maximum, standard deviation, skewness, and the multiple regression analysis. The study used Statistical Package for Social Sciences Version 21.0 to aid in data analysis. The analysis will be done at 0.05 level of significance.

3.4.1 Analytical Model

In order to determine the relationship between foreign direct investment and public debt in Kenya, the researcher conducted a multiple regression analysis using the following regression model. The model is based on the arguments of Udomkerdmongkol, Gorg and Morrissey (2013) on domestic investment, FDI and external debt:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

$$Y = \text{Foreign Direct Investment (Growth in FDI)} = \Delta Y = \frac{\text{FDI year 2} - \text{FDI year 1}}{\text{FDI Year 1}}$$

Expressed as a percentage)

X_1 = Domestic debt (Natural Log of total money borrowed locally)

X_2 = Foreign debt (Natural Log of total money borrowed from abroad)

X_3 = Economic Growth (GDP)

ϵ = Error term/Erroneous variables

β_0 = the minimum change in Y when the rest of the variables are held at a constant zero

β = measure of the rate of change i.e. β_1 measures the rate of change in Y as a result of a unit change in X_1 .

Table 3.1: Operationalization of Variables

Variable	Measures
Foreign Direct Investment	Growth in FDI = $\Delta Y = \frac{\text{FDI year 2} - \text{FDI year 1}}{\text{FDI Year 1}}$ Expressed as a percentage
Domestic Debt	Natural Log of total money borrowed locally
Foreign Debt	Natural Log of total money borrowed from abroad
Economic Growth	Growth in GDP = $\Delta X_3 = \frac{\text{GDP year 2} - \text{GDP year 1}}{\text{GDP Year 1}}$ Expressed as a percentage

Source: (Author, 2015)

3.4.2 Test of Significance

In order to test the significance of the model in measuring the relationship between FDI and public debt, this study will conduct an Analysis of Variance (ANOVA). On extracting the ANOVA statistics, the researcher will look at the significance value. The study will be tested at 95% confidence level and 5% significant level. If the significance number found is less than the critical value set 2.4, then the conclusion will be that the model is significant in explaining the relationship.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the data analysis and interpretation. The study sought to establish the relationship between public debt and foreign direct investments in Kenya. To achieve this, the study was guided by the objective: To determine the relationship between public debt and foreign direct investments in Kenya. Secondary data from the Kenya National Bureau of Statistics and the Central Bank of Kenya was used and presentation and interpretation is given below through the use of a frequency distribution tables, mean and standard deviation; multiple regression analysis and Analysis of Variance (ANOVA).

4.2 Descriptive Statistics

The study undertook to perform a descriptive statistic test to determine the general properties of the collected data at a glance. The output is as explained in the subsequent sections clearly showing the minimum, maximum, means and standard deviations. The findings were as shown in the Table 4.1 below:

Table 4.1: Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation	Skewness	
						Statistic	Std. Error
FDI	60	264.20	33872	4403.3515	7001	-3.002	.309
Domestic debt	60	194693	1307749	537963.32	331610	1.014	.309
Foreign debt	60	364904	1170697	5489950.4	208408	1.394	.309
GDP	60	24394 2.13	976528 .86	508198.6 498	280821. 80262	.496	.309

The findings indicate rising and falling FDI values with huge variations over the 15 year period with the mean of 4403.3515 and standard deviation of 7000.73302, the high scores of standard deviation indicate variation in the yearly FDI values of Kenya over the period of study. However, the findings indicate that there has been higher FDI values in the latter years [2005-2014] compared to the former years [2000-2005]. The FDI had a negative skewness of -3.002 showing that FDI has most values concentrated on the right of the mean, with extreme values to the left in the normal distribution.

On domestic debt, the minimum value was 194693 while the maximum value was 1307748.71. The domestic debt in Kenya has been on increase over the past 15 years. It had a positive skewness of 1.014 which showed that the domestic debt in Kenya had been fluctuating around mean with most values concentrated on left of the mean 537963.32, while extreme values are to the right over the period. The distribution was however approaching that of a normal distribution since the curve was almost symmetric about the mean. This is due to the fact that the skewness statistic was greater than 0.

Foreign debt fluctuated over the study period although it increased from one year to another starting the year 2000 with the mean of 548950.414 and a standard deviation of 208407.98105. The maximum value was 1170696.28 and the minimum was 364904. The foreign debt data was positively skewed with a co-efficient of 1.394 implying that most values are concentrated on left of the mean, with extreme values to the right. Figure 4.2 further showed that the foreign debt data of Kenya for that period was skewed to the right but resembled a normal curve since the curve was almost symmetric about the mean. The

figure further ascertains that the foreign debts in Kenya were generally biased on the right of the mean.

The mean for the GDP for the 15 years was 508198.6498 with a standard deviation of 280821.80262. The minimum GDP value was 243942.13 experienced in the first quarter of 2000 due to the relatively few sectors used in computing the national index and the maximum value was 976528.86 in 2014. These findings revealed that the economic growth has been constantly growing over the 15 years study period. The GDP had a slight positive skewness of 0.496 meaning that most values are concentrated on left of the mean, with extreme values to the right. This implied that the growth distribution of GDP was therefore approaching a normal distribution since the curve was almost symmetric about the mean. The GDP was therefore increasing above the mean. The sample size was 60 since the researcher adopted quarterly data for a period of 15 years from 2000 till 2014.

4.3 Co-relation analysis

The co-relation analysis was also conducted to establish the relationship between the independent variables themselves and also the association between each independent variable and the dependent variable. The results are as shown in Table 4.8.

Table 4.2: Correlations

		GDP	Domestic debt	FDI	Foreign debt
GDP	Pearson Correlation	1			
	Sig. (2-tailed)				
Domestic debt	Pearson Correlation	.937	1		
	Sig. (2-tailed)	.001			
FDI	Pearson Correlation	.432	.586	1	
	Sig. (2-tailed)	.001	.001		
Foreign Debt	Pearson Correlation	.898	.970	.600	1
	Sig. (2-tailed)	.001	.001	.001	

Correlation is significant at the 0.05 level (2-tailed).

A multiple co-relation analysis was conducted so as to establish the multi co-linearity between the study variables. The domestic debt had a strong co-relation with GDP as shown by a co-efficient of 0.937. The co-relation between domestic debt and foreign debt was a strong one with a co-efficient of 0.970. Similarly a positive strong co-relation exists between foreign debt and GDP with a co-efficient of 0.898. The domestic debt had a moderately strong positive co-relation with FDI with a co-efficient of 0.586. The co-relation between Foreign Debt and FDI was strong one with a co-efficient of 0.600. Lastly, the co-relation between GDP and FDI was a weak one with a co-efficient of 0.432. The research findings therefore revealed that the Foreign debt and domestic debt had a positive co-relation with FDI. Nevertheless, all the co-relations were significant since the co-relations significance value were less than preset significance. In essence however, strong multi-co linearity was found to exist between the independent variables

4.4 Regression Analysis

In determining the relationship between public debt and foreign direct investment in Kenya, multiple regression analysis was conducted to determine the nature of relationship

between the variables. The study applied the statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions for the study. The findings are as presented in the following tables;

Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.894	0.799	0.762	0.004

The coefficient of co-relation was 0.894 whereas the value of R-square was 0.799. The adjusted R square was 0.762 with a standard error of the estimate at 0.004. This implied that the study independent variables contributed 79.9% of the changes in the foreign direct investments in the study period. This therefore implied that the other factors not included in the study contributed the remaining 20.1% of the changes in the dependent variable.

The study therefore concluded that GDP, foreign debt and domestic debt significantly influenced the foreign direct investments in the country. These findings concur with Ostadi and Ashja (2014) who concluded that debts have significant effects on foreign direct investments. Wamboye (2012) suggested that high external debt has an underlying effect on economic growth, regardless of the nature of the debt and more so foreign direct investment.

Table 4.4: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	261698.485	3	87232.828	11.43	.0040
Residual	427421.300	56	7632.5202		
Total	4535909.785	59			

From the findings the significance value is 0.004 which is less than 0.05 thus the model is statistically significant in predicting how Economic growth (GDP), External debt and domestic debt affect foreign direct investment (FDI). The F critical at 5% level of significance was 1.96. Since F calculated (value = 11.43) is greater than the F critical (1.96), this shows that the overall model was significant.

Table 4.5: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3674.699	2258.121		1.627	.109
	GDP	225	2515	0.012	0.090	.929
	Foreign Debt	572.877	327.412	0.679	1.750	.086
	Domestic Debt	300.274	180.551	0.632	1.663	.102

From the regression findings, the substitution of the equation ($Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$) becomes:

$$Y = 3674.699 + 225 X_1 + 572.877 X_2 + 300.274 X_3 + \varepsilon$$

Where Y is the dependent variable (FDI), X_1 is the GDP, X_2 is the Foreign debt and X_3 is the Domestic debt.

According to the model, taking all the factors (Economic growth (GDP), foreign debt and domestic debt) constant at zero, FDI was 3674.699. The data findings also showed that a unit increase in GDP led to a 225 increase in FDI; a unit increase in external debt led to a 572.877 increase in FDI; a unit increase in domestic debt led to a 300.274 increase in

FDI. This meant that the most significant factor in influencing foreign direct investment was domestic debt followed by GDP. The Foreign debt had the least effect on foreign direct investment. These findings depict that a positive relationship exists between GDP, domestic debt and the foreign direct investment. The study therefore established that a positive relationship existed between two independent variables and the dependent variable in the study.

4.5 Discussions of Findings

The study established that a relationship existed between the independent variables in the study that is foreign debt, domestic debt and GDP influenced FDI. A positive relationship was observed between two studied variables and FDI. In essence, the study revealed that a higher amount of FDI spurs economic growth in the country. These findings however disagree with Muinga (2014) who deduced that external debt and interest payments on such external debt payments contributed negatively to the economic growth of Kenya. Mukui (2013) further indicated that external debt and subsequent servicing had positive effects on economic growth. The study further established that domestic debt had significantly increased in the country during the study period. These research findings concur with Matiti (2013) who established that debts were increasing in the country in the study period 2003-2012. However, the study further contradicts with Marini (2000) who claims that there is no evidence for a relationship between external debt financing and foreign investment. The study results suggested that foreign debt financing had negative effect on the investment.

A look at the regression analysis indicated that all the independent variables discussed (GDP, foreign and Domestic Debt) had direct relationship with FDI in Kenya as they all had positive coefficients. All these independent variables together influenced FDI to 79.9%. These findings are consistent with those of Ajisafe et al. (2006) whose findings show that the variables are stationary at first differencing. These findings however contradict those of Azam and Ullah (2011) who established that FDI was negatively affected by the country's bad debt condition and signifies a relatively unfavorable environment for foreign investment.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the summary of key data findings and draws conclusions from the findings based on the objective. The Chapter also presents the recommendations made from the findings. The objective of this study was to determine the relationship between public debt and foreign direct investments in Kenya.

5.2 Summary of the Findings

The study established that a relationship actually existed between the independent variables in the study and the dependent variable. Domestic debt, foreign and GDP had a positive relationship with The FDI as shown by the regression results. Domestic debt had a positive impact on FDI as indicated by the positive beta co-efficient with FDI. The variable was the highest in influencing FDI in the country in the study period where a unit increase in domestic debt led to a 300.274 increase in FDI as per the regression model. Domestic debt had a moderately strong co-relation with the FDI.

Foreign debt was the second most influential in determining FDI in the country. This variable had a strong co-relation with FDI as shown by the co-relation results. From the findings, a unit increase in foreign debt led to a 572.877 increase in FDI. This variable had the highest impact on FDI in the study period. Foreign debt therefore positively influenced the level of foreign direct investment in the country.

A positive relationship was also observed between GDP growth and FDI. The GDP however had the least influence on the FDI as indicated by the small beta co-efficient. Consequently, the GDP had a positive co-relation with FDI. The data findings also showed that a unit increase in GDP led to a 225 increase in FDI. Therefore, GDP has a positive impact on the FDI levels in the country. . These findings therefore warranted that the study variables had an effect on FDI. By the positive observed relationship between the independent variables and the dependent variables, the study objective was therefore accomplished since a positive relationship was established between the study variables. The nature of the relationship was established and hence the study objective was accomplished.

5.3 Conclusion

The impact of FDI is felt in the country not only as a source of foreign exchange but also plays a critical role in upgrading technology, skills and managerial capabilities in various sectors of the economy as well as opening up the borders of a country. Given that there have been higher FDI values in the latter years [2006-2014] compared to the former years [2000-2005] and the corresponding increase in Kenya's actual Public debt values over the same period, the study concludes that there exists a positive relationship between FDI and the public debt in Kenya. Public debt has a significant positive relationship on FDI. This indicates that rise in public debt for a country improves FDI.

The study concluded that there was a general steady increase in Kenya's external and internal debt over the 15 year period. Consequently, Kenya's actual Foreign Direct Investments values had a positive relationship with the study's independent variables.

These showed that the public debt in Kenya had influence on foreign direct investment in Kenya in the last 15 years. Based on the correlation analysis, external debt, domestic debt and GDP were positively related to FDI. From regression analysis, the most significant factor affecting FDI was domestic debt followed by GDP.

5.4 Recommendations

From the findings, the study revealed that domestic debt and GDP positively influenced FDI. Therefore the study recommends that the government policy makers need to push reform agenda on public debt so as to attract more FDI in the Kenyan economy since a higher investor's confidence in domestic market acts as a stimulus in attracting FDI inflows.

Policies such as opening up of the economy by engaging in more bilateral and multilateral trade agreements, improving the quality of infrastructure by way of channeling more resources to its development will reduced the public debt to an extent. These policies may enhance the attraction of FDI thereby increasing economic growth.

5.5 Limitations of Study

This study limited the data to the period 2000-2014 with data being collected quarterly and focused only on Public Debt as a determinant of FDI. The analysis was therefore not done outside the duration or on other determinants of FDI. The data used was based on public debt and remittances available on KNBS as well as CBK, any data not recorded by these two bodies was not considered for the purpose of this study.

Another limitation involved the high changes that have taken place within the Kenyan

Leadership within the study period. There have been three elections and three government regimes. Elections distort several factors as new governments come with their own priorities, policies and manifestos. Another limitation included high changes in the macroeconomic factors which may have affected some of the variables used in the study. An example is interest rates which have fluctuated a lot in the last 15 years in Kenya and may have influenced the FDI inflows and domestic debt

5.6 Suggestions for Further Studies

The study sought to establish the relationship between domestic and foreign debt on foreign direct investments in Kenya. The study recommended that in order for comparisons to be made, then research in other neighboring countries ought to be done. Generalization of findings on the relationship that exists between domestic and foreign debt on foreign direct investments can be done in the near future.

The study's independent variables only contributed a portion of the changes in FDI. This is due to the fact that FDI is still affected by other macro-economic factors not included in the study. Future studies ought to address this issue by introducing a wider pool of independent variables in similar studies so as to identify the variables causing the 20.1% changes in FDI.

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APPENDICES

Appendix I: Data on Real Gross Domestic Product, External Public Debt, Domestic Public Debt and Foreign Direct Investment (KShs. Millions)

Year	Quarter	RGDP	External Debt	Domestic Debt	FDI
2000	Q1	243,942.13	396,800.00	201,323.00	2,803.68
	Q2	244,797.25	395,694.00	206,100.00	3,106.88
	Q3	246,141.31	399,799.00	195,520.00	3,859.68
	Q4	247,974.31	405,355.00	194,693.00	2,704.38
2001	Q1	252,751.91	403,374.00	202,651.00	1,216.95
	Q2	254,580.52	393,978.00	211,813.00	1,097.49
	Q3	255,915.80	392,053.00	219,165.00	1,140.57
	Q4	256,757.76	384,303.00	221,984.00	1,206.24
2002	Q1	254,916.15	380,169.00	229,167.00	502.62
	Q2	255,647.54	377,836.00	235,991.00	1,134.96
	Q3	256,761.70	375,034.00	250,809.00	738.17
	Q4	258,258.62	369,729.00	259,828.00	1,714.12
2003	Q1	260,165.18	364,904.00	270,716.00	3,922.97
	Q2	262,416.88	407,053.00	289,376.97	829.88
	Q3	265,040.60	411,067.00	303,252.33	674.79
	Q4	268,036.34	410,149.00	301,189.93	792.77
2004	Q1	271,878.93	412,035.08	302,023.29	898.25
	Q2	275,428.76	443,157.43	306,234.47	871.37
	Q3	279,160.66	454,437.85	299,745.46	1,023.70
	Q4	283,074.65	448,198.55	295,374.80	792.77
2005	Q1	287,280.09	427,514.17	296,329.91	264.20
	Q2	291,514.48	434,452.60	315,572.50	454.91
	Q3	295,887.20	418,860.33	328,799.98	290.66
	Q4	300,398.24	408,601.92	335,001.89	591.29
2006	Q1	304,886.05	407,003.71	346,064.04	607.14
	Q2	309,738.38	431,237.40	357,839.03	495.02
	Q3	314,793.66	422,647.93	371,591.00	1,051.53
	Q4	320,051.90	407,742.55	385,120.61	1,496.06
2007	Q1	328,635.78	409,055.74	386,288.06	1,221.33
	Q2	333,050.84	396,564.00	404,690.11	1,002.80
	Q3	336,419.78	408,680.79	426,821.36	1,531.32
	Q4	338,742.59	406,923.00	438,058.51	33,871.52
2008	Q1	279,357.64	425,086.89	444,748.94	11,515.58
	Q2	303,852.86	439,967.00	430,611.73	1,159.94
	Q3	351,566.61	476,570.00	449,253.90	2,426.59

Year	Quarter	RGDP	External Debt	Domestic Debt	FDI
	Q4	422,498.89	515,391.35	456,227.91	1,280.34
2009	Q1	624,141.30	513,623.00	474,892.63	3,487.54
	Q2	698,514.01	537,403.00	518,506.76	2,543.57
	Q3	753,108.60	524,982.60	550,687.34	2,598.98
	Q4	787,925.09	525,526.82	588,970.31	4,673.69
2010	Q1	755,506.16	538,157.99	639,076.65	2,393.18
	Q2	769,749.34	565,452.00	660,267.68	3,609.37
	Q3	783,197.34	594,223.00	704,702.77	4,061.46
	Q4	795,850.16	599,930.00	720,327.97	3,989.98
2011	Q1	807,281.61	639,113.00	753,979.10	2,650.62
	Q2	818,514.52	727,266.00	764,222.78	3,585.12
	Q3	829,122.70	799,834.03	764,274.59	2,516.16
	Q4	839,106.17	685,607.92	800,677.66	3,638.26
2012	Q1	845,089.34	676,612.67	887,871.40	3,055.28
	Q2	855,173.60	764,526.33	858,829.55	2,482.12
	Q3	865,983.38	802,457.33	922,205.02	3,351.05
	Q4	877,518.68	821,972.82	971,405.52	5,219.22
2013	Q1	891,680.55	818,763.64	981,910.76	3,544.32
	Q2	903,906.45	843,562.27	1,050,555.97	5,508.23
	Q3	916,097.45	889,313.51	1,168,227.19	6,674.19
	Q4	928,253.55	922,369.15	1,189,183.00	11,666.44
2014	Q1	940,374.73	940,450.00	1,284,200.00	19,306.45
	Q2	952,461.02	1,085,928.57	1,284,224.97	16,950.93
	Q3	964,512.39	1,087,827.67	1,260,874.56	25,034.93
	Q4	976,528.86	1,170,696.28	1,307,748.71	31,367.53

Source: Kenya National Bureau of Statistics and Central Bank of Kenya