RELATIONSHIP BETWEEN EXTERNAL GOVERNMENT BORROWING AND FOREIGN DIRECT INVESTMENT 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 declare this study to my dear parents for all the financial for all the financial, social,

emotional and spiritual support they gave me all the time I worked on this project.

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LIST OF ABBREVIATIONS

ANOVA   Analysis of Variance

CBK   Central Bank of Kenya

EEC   European Economic Community

EIB   European Investment Bank

FDI   Foreign Direct Investments

GDP   Gross Domestic Product

GOK   Government of Kenya

IDA   International Development Association

IFAD   International Fund for Agricultural Development

IMF   International Monetary Fund

KNBS   Kenya National Bureau of Statistics

LDC   Less Developed Countries

SPSS   Statistical Package for Social Sciences

UNCTAD   United Nations Conference on Trade and Development

ABSTRACT

Lack of domestic financial resources has been identified as the main challenge facing Less Developed Countries 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. Foreign direct investment inflow movements into a country are influenced by changes in many economic variables that lead to prospect changes. Countries need to seek new ways of attracting FDI stock since motives of investors are varying over. Research is therefore crucial for investment decision making and predictability of FDI inward stock is imperative. This study sought to determine the effect of external government borrowing on foreign direct investments inflows in Kenya. The independent variable was external government borrowing as measured by quarterly external government borrowing in natural logarithm form. The control variables were economic growth as measured by quarterly GDP growth rate 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 2008 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 0.644 which means that about 64.4 percent of the variation in FDI inflows in Kenya can be explained by the four selected independent variables while 35.6 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=0.803). ANOVA results show that the F statistic was significant at 5% level with an F statistic of 21.725. Therefore the model was fit to explain FDI inflows in Kenya. The results further revealed that individually, external government borrowing and economic growth are not significant determiners of FDI inflows in Kenya while inflation rate is a significant determiner. This study recommends that there is need for policy makers to regulate external government borrowing levels prevailing in the country bearing in mind that they can influence FDI inflows in the country.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

External government borrowing is a 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 gradual 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, the main source of borrowing for governments is issue of securities, their interest rates, terms and other debt financing costs. This affects the economy, sustainability of enterprises and the social welfare of both present and future generations. Martin (2009) opines that public debt further serves as a means of delaying taxation thus reducing current distortions.

This study was guided by several theories such as the debt overhang theory, internalization theory and the eclectic paradigm theory that have tried to explain the relationships between external government borrowing and foreign direct investment inflows. Debt overhang theory is anchored on the notion that if debt exceeds the repayment ability of the country, the expected debt service is likely to exceed the country's output level which will negatively affect foreign direct investment inflows in the economy (Krugman, 1988). Internalization theory explains the growth of multinational corporations and their motivations. It demonstrates that multinational corporations organize their internal activities to achieve specific advantage and exploit them to enhance its competitiveness (Casson & Buckley, 1976). Eclectic

paradigm by British Economist, John Dunning states that location-specific advantage is highly relevant in explaining both the direction and rationale of Foreign Direct Investments. By location specific advantage, Dunning refers to the benefits accrue from the utilization of resource donation or possessions that are coupled to a specific foreign location and that a company finds important to merge with its own unique resources such as company's technical, marketing or administration potential (Charles, 2008).

In Kenya, government external borrowing has recently increased, and new debts mostly fund infrastructure to address traffic and enhance sustainable growth. Much of Kenya's external public debt has concessional terms, though recent commercial debts has notable needs in repayment in 2017 (2015 syndicated loan), in 2019 and, more so in 2024 (2014 sovereign bond issuance). Foreign direct investment inflows to Kenya fluctuated from 1990 to 2008 and then started to increase until 2014. This implies that multinationals and their subsidiaries have continued to raise goods and services producton in Kenya (Abala, 2014). In Kenya, fixed capital formation stands at 21 % of GDP of which 7% is contributed by FDI (World Bank, 2017).

1.1.1 External Government Borrowing

External government borrowing is part of the nation's debt acquired from external lenders like commercial banks, governments or financial institutions. It has to be repaid in the same currency as it was acquired (Akram, 2010). The external debt can be from bilateral, multilateral or commercial sources. Bilateral sources are like government to government whereas multilateral sources include government to a mixture of countries or agencies. State, provincial or local government debt may be part of public debt as well. Multilateral debt may be acquired from financial

institutions like International Monetary Fund, African Development Bank and the World Bank among other institutions (UNCTAD, 2017).

External government borrowing is a way of funding government activities, although not the sore way as governments could also generate money to fund their debts, hence eliminating the need to pay interest (Martin, 2009). Nonetheless, this action only minimizes government costs of interest instead of completely eliminating the debt and could lead to hyperinflation if unsparingly used.

One way to measure external public debt is to compare it to the economy's production or gross domestic product. Measuring debt in absolute terms ignores the wealth and productivity of a country. A wealthy, highly productive country is much better placed to incur and carry a large external debt than a poor country. Thus, a more meaningful measure of external public debt is relative to a country's GDP rather than absolute terms (Matiti, 2013). External debt-GDP ratio allows for useful comparisons across countries over time with regards to a government's ability to service its debts and manage its fiscal situation in general. Faster GDP growth relative to the growth of external debt helps countries to keep the external debt-GDP ratio under control. Low economic growth causes an increase in the external debt-GDP ratio. The current study will use external government to GDP ratio as a measure of external government borrowing.

1.1.2 Foreign Direct Investment Inflows

FDI can be described as an investment done in a corporation by an interested party from another nation for which the company is controlled by a foreign investor. This transaction brings about a long term association between the host and home country investors (Olson, 2008). According to Ismaila and Imoughele (2010), FDI represent

long term commitments to the host country. It is a preferred form of investment because it has no obligations to the host country. UNCTAD (2002) describes three different types of FDI. These are: reinvested earnings, equity capital and other capital which mainly consist of intercompany loans. Foreign Direct Investments 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 creating jobs.

According to Kariguh (2014), foreign investment is one of the main sources of capital flows in most economies that are still developing as they tend to bridge the gap of capital, managerial skills, technology, and formation of human capital as well as creating an environment for more business competition. However, according to Voorpijl (2011), there are consequences for increasing the FDI inflows whereby the multinationals can exploit the local capabilities more freely. The promotion of private investment rather than public investments by many international donors also leaves nothing to the host company when they leave.

Foreign direct investment measurement is based on foreign direct investment stock which is expressed as a percentage of the GDP of a nation. It is normally published at the end of year with its components being outward Foreign Direct investment stock. This includes residences' equity investments and credits to foreign countries and inward foreign direct investment stock which is foreigners' equity investment and credits to host economy. The problem with this method is that developing nations do not possess the required systems and technology to collect these data efficiently. Along with FDI stock, FDI flows is also a measure of foreign direct investment. Though it's volatile in nature this makes FDI stock a suitable measure of foreign

direct investment as FDI stock incorporates changes in the economy such as inflation and exchange rate (Nunnenkamp, 2002).

1.1.3 External Domestic Borrowing and Foreign Direct Investment Inflows

According to economic theory, external 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. 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) showed 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 FDI and economic growth, despite the type of debt.

According to Schnitzer (2000), the sovereign risks linked with debt financing have proven to have lesser repercussions than those associated with FDI. Therefore, FDI is viable if the investor is highly efficient in managing their project, has a better deal outside and if the project is risky (Ribeiro et al., 2012). Therefore they find a positive association between FDI and public debt. Udomkerdmongkol Et al. (2013) conducted an empirical investigation on FDI, domestic investment and external debt. Their findings revealed that foreign debt financing does not affect investment. No evidence however exists on external debt financing and domestic investment in the two regimes.

1.1.4 External Government Borrowing and Foreign Direct Investment in Kenya

The amount of external government borrowing has been continually rising with the budget reaching a whopping 3.1 trillion in the 2018/2019 budget while the estimated national revenue was 1.7 trillion which is slightly over half the total expenditure (CBK, 2018). Borrowing is one of the avenues through which Treasury can finance a deficit. The debt levels are expected to rise with the approval by National Assembly to raise the external debt ceiling from KES 1.2 trillion to 2.5 trillion. This money is for financing the second phase of standard gauge railway (SGR), build roads and fund the big four agenda comprising of food security, health, housing and manufacturing (Were, 2018).

The greater part of Kenya's external public debt is still in terms of concessions, though its commercial aspect has raised. By the end of year 2015, Nominal public external debt was US$16.1 billion equal to 26.4per cent of GDP. Debt to bilateral lenders is almost half to Paris Club lenders, and half to other bilateral creditors, mainly semi-concessional loans from China to fund SGR first phase (Mombasa-

Nairobi). In December 2015, Kenya acquired more semi-concessional loan from China of US$1.5 billion, to be received in the coming years, for the second SGR phase (Nairobi-Naivasha). Kenya's commercial financing has two main elements; in 2014, Kenya issued its inaugural sovereign bonds, at 5-year and 10-year maturities, raising US$2 billion in June and a further US$750 million in December 2014 (CBK, 2018).

Although the external public debt has been on a rise, the same cannot be said about foreign direct investment inflows. For years Kenya has been seen as an attractive destination for foreign investors seeking to invest in the greater East and Central Africa region. However, the country has also seen multinational corporations that had well established operations in the country leaving in unclear circumstances and this has negatively affected FDI inflows into the country. Experts have attributed these exits to government policies and this study will seek to investigate whether external public debt influences FDI inflows.

1.2 Research Problem

Lack of domestic financial resources has been identified as the main challenge facing Less Developed Countries 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, FDI, remittances and concessional lending (Mahiti, 2012). Both theory and empirical literatures hold that a country's growth has a direct link with the economy, which is made of many variables such as the GDP, remittances, external government debt, FDI, interest rate, inflation, exchange rate, money supply, and many others. These variables are the backbone of any economy (Mitullah, 2010). Foreign direct investment inflow movements into a country are

influenced by changes in many economic variables that lead to prospect changes. Countries need to seek new ways of attracting FDI stock since motives of investors are varying over. Research is therefore crucial for investment decision making and predictability of FDI inward stock is imperative.

Kenya's public debt stands at 55 percent of GDP out of which half is owed to external creditors (Government of Kenya, 2018). In regards to foreign direct investment inflows, the country still remains an economic hub in the region and has retained regional advantages in FDI location. Overseas investors in the country have inclined to comparatively minor investments but they are several and reputable in an extensive range of the economy. Anytime time there is a deep in FDI inflows such as in the last quarter of 2012 and mid-2015, measures have been undertaken to ensure the deep is not long lasting. The current study seeks to establish if the prevailing levels of external government borrowing has a significant relationship with foreign direct investment inflows into the country.

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. 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. Although Wabwalaba (2017) focused on the effect of public debt on FDI inflows in Kenya, his study combined both the domestic and external borrowing. Mogaka and Elly (2018) focused on the effect of domestic public debt on development of the financial markets in the East African Community countries and found that domestic public debt has a significant effect of financial development. This study however did not take into account FDI inflows. The current study seeks to leverage on this research gap by answering the research question: What is the relationship between external government borrowing and foreign direct investment inflows in Kenya?

1.3 Objective of the Study

The objective of this study is to determine the relationship between external government borrowing and foreign direct investment inflows in Kenya.

1.4 Value of the Study

The study discoveries will go about as a kind of reference point for future researchers, students as well as scholars looking to carry out studies on the equivalent or a closely related field. The scholars and researchers may likewise find it supportive in the reorganization of related study areas by pointing out topics that require additional research and reviewing of existing empirical literature to distinguish gaps in the study

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 section gives a presentation of theoretical framework used as well as reviewing former studies on external government borrowing and foreign direct investment inflows. It has the theoretical review, determinants of FDI inflows, empirical review, the conceptual framework and a summary of the literature.

2.2 Theoretical Framework

The section presents relevant theories which can be used to explain the association between public debt and foreign direct investments. The theoretical reviews covered are; debt overhang theory, internalization theory and the eclectic paradigm theory.

2.2.1 Debt Overhang Theory

According to Krugman (1988), "debt overhang" is a condition where the expected repayment ability of an economy of external debt is below the debt contractual value. Cohen's (1993) theoretical model argues that foreign debt has a non-linear effect on investment as propagated by Clements et al., (2003) who argues that this association could influence growth. Therefore foreign debt accumulation promotes investment up to a certain level where debt overhang starts to create negative implications on the willingness of the investor to inject more capital. Similarly, the growth model of Aschauer (2000), which holds that public capital brings a nonlinear effect on economic growth, could be used to explain the effects of public debt.

According to Reinhart et al., (2012), public debt overhang is a result of development fiscal crises database over the past few years. Before this database was developed,

public debt significantly influenced economic growth. For instance, Barro and Sala-i-Martin (1995) demonstrated empirically that the government consumption to GDP ratio negatively affects per-capita GDP. No evidence however exists on whether the amount of public debt has a strong effect. However, Fischer (1991) demonstrated empirically that fiscal deficit has negative implications on GDP but failed to confirm whether public debt amount has an impact on per-capita GDP (Kobayashi, 2015). This theory relates to the current study as it recognizes the role of external debt in influencing foreign direct investments in an economy.

2.2.2 Internalization Theory

This theory was advanced by Casson and Buckley (1976). Further development of the theory was by Hennart (1982) and benefits from addition works by Casson (1983). The theory explains the growth of multinational corporations and their motivations. It demonstrates that multinational corporations organize their internal activities to achieve specific advantage and exploit them to enhance its competitiveness. According to Hymer (1976), FDI will occur only when the exploitation of firm specific advantage supersede the relative cost of investing abroad. In summary, he implies that FDI occur in imperfect markets and it's simply a strategy decision at firm level rather than a financial decision of the capital market.

Casson and Buckley (1976) argue that an FDI is only attractive if the Ownership, Location and Internalization (OLI) conditions are met. First, the multinational must have an ownership advantage compared to the local firm's ownership. This may be in form of the multinational's specific organizational or technological knowledge. The government policies' likely on the benefits of investing in a certain host country is also vital. In some cases the host government may pose regulations concerning the

nature of foreign ownership. Such restrictions in effect reduce FDI inward inflows which will be accompanied by technology. Secondly, it must be advantageous for the multinational companies as well as other investors to produce in the host country if they can benefit from some comparative locational advantage. Finally, it should be suitable to execute the activities within the host countries, as opposed to leasing or buying them from other firms. The theory relates to the current study since it explains the motivation of firms to invest in foreign countries. Government policies in the foreign country are one of the key considerations and this may affect FDI inflows.

2.2.3 Eclectic Paradigm Theory

Dunning (1993) came up with this theory which is in itself a mix of three different 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

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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 meager 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. If this theory was to apply, then external debt would have an influence on FDI inflows as foreign firms would consider this in their selection of where to invest.

2.3 Determinants of Foreign Direct Investment Inflows

FDI involves real assets and this ensures that an investor will be active in managing the assets he is acquiring. A number of issues exist which cause the attractiveness of one country to be more than the other and these factors can also vary from one period to another. These determinants have contributed to studies on why some given countries are more prosperous than others nations in attracting FDI. Quite many researches have been carried out on the determinant factors of FDI but so far there is yet to be a definite consensus. The different approaches to the determinants of FDI do

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not cancel each other out but expound on various issues of a similar phenomenon (Kinuthia, 2010).

2.3.1 External Government Borrowing

According to economic theory, external 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. 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) show that 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 Inflation

In order to manage the macroeconomic environment and fiscal governance, inflation is very key. It is determined by shifts in the consumer price index which is a weighted average price of consumed goods and services (Nwankwo, 2006). Tensions in the economic environment of a nation occurs when the inflation level is high and it

depicts 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 cause decreases in FDI in the hosting nation 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. Thus, as a move to encourage investments, inflation rate stability is paramount (Gastanaga et al., 1998). Nwankwo (2006) has stressed macroeconomic policy failures 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 (Onyeiwu & Shrestha, 2004).

2.3.3 Interest Rates

According to Agiomirgianakis (2003), FDI is capita that flows into a country due to investments by multinational companies. The economic theory which elaborates on ways that capital moves in the globalized economy insist that capital flows into nations that have a higher investment return as compared to those with higher rates of interest (Pholphirul, 2002). Consequently, investment is higher in Nations that give better investment returns and security in the form of lower rates of interest and a better business environment. Capital therefore tends to move from countries with low rate return to those with high rate of return.

Singania (2011) argues that interest rates are accordingly adjusted to show inflationary changes. As a result, interest rates are critical determinants of foreign direct investment. Traditionally, investors will shop for low cost credit sources or

lower rates of interest and invest it in economies that promise higher returns. According to Vesarach (2014), who conducted a study on the role of interest rates in attracting FDI in the Asian economies; the results showed that the determinants of FDI are interest rates, inflation, GDP, exchange rates, labor cost, money growth and political rights. The researcher concluded that countries should offer competitive interest rates to attract foreign direct investments in their country.

2.3.4 Exchange Rates

Exchange rate is an essential component affecting FDI. Asiedu (2002) stated that different currency areas were responsible for the generation of FDI. Dunning (1993) stated that greater fixed capital stakes of an investment showed the possibility of taking into account future movements in exchange rates. 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 et al., 2008).

2.3.5 Economic Growth

Many scholars have been attracted to the issue on the role played by economic development in attracting foreign direct investment. According to Charkrabarti (2001) better improved opportunities for gaining profits are attributed to by a rapidly growing

economy as compared to those that are growing slowly or not increasing at all. Mishkin and Eakins (2009) find a high outcome of growth on FDI, while Gastanaga et al., (1998) gains a stiff back up for the hypothesis between 1983 and 1986, but only a weak link between 1975 and 1978.

Basing on the same guidelines, Aoki (2007) established that for the less developed nations, there is a weak positive relationship and a weak negative relationship for the developed nations. Asiedu (2002) asserted that lagged growth for the full sample and non-Sub-Saharan nations in Africa are affected positively, whereas there the Sub-Saharan Africa sample has an insignificant impact. Gastanaga et al., (1998) found significant positive effects of growth on FDI.

2.3.6 Availability of Good Infrastructure

Productivity of investment is increased by good infrastructure which increases FDI flows (Asiedu, 2002). According to Wheeler and Mody (1992) infrastructure is very crucial for developing countries. It is not only made up of roads alone but also telecommunications. In order to enhance communication between the host and home countries, there is need for availability and efficiency of telephones. Not only is physical infrastructure crucial to FDI inflow, but also financial infrastructure. In order to tap the full importance of an FDI inflow, there is need for a well-developed financial and infrastructural system.

2.4 Empirical Review

Many empirical studies both locally and internationally support the association between public debt and foreign direct investments, but these studies have produced mixed results.

2.4.1 Global Studies

Ali and Mustafa (2010) analyzed short and long run effects of public debt on economic growth in Pakistan for the period 1970-2010. They applied co-integration analysis to capture the long run effects of debt on GDP. Their findings revealed that external debt has a strong impact in both the short run and long run while labour force negatively affects GNP in both long and short run. The increase in capital formation also have positive effect on GNP in the long and short run though the positive effect of capital is more than that of human capital. This theory was carried out in a different context and its findings may not be applicable in the Kenyan context.

Azam and Ullah (2011) investigated on the influence of public debt on FDI in Pakistan. The result showed that FDI is negatively influenced by the poor debt condition of the country and signifies relatively unfavorable conditions for foreign investment. Their study also concluded that based on the benefits of foreign investment, the government requires 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. This theory was carried out in a different context and its findings may not be applicable in the Kenyan context.

Okafor (2012) studied on the value of domestic macroeconomic variables matter for FDI inflow in Nigeria. Prediction that foreign capital flows could boost economic growth of nations is the major finding of the study. The study used ordinary least square method as an estimation technique. Foreign direct investment in Nigeria is majorly determined by real GDP, real exchange rate and rate of interest as per the findings. FDI inflow is majorly determined by domestic macroeconomic variables.

Tis study however did not focus on public debt as one of the variables that have an effect on FDI inflows.

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 significance 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 gave 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 foreign debt financing have no impact on investment. This theory was carried out in a different context and its findings may not be applicable in the Kenyan context.

Omweri (2013) studied the determinant factors of FDI stock in the five countries of the East African Community i.e. Uganda, Kenya, Burundi, Tanzania and Rwanda to find out why the region was recording very low increase of FDI. The research employed panel data analysis methods. The study used trade openness, Gross Domestic Product per Capita, Gross Domestic Product growth, telephone line (per 100 people); a proxy for infrastructural facilities, inflation, return on investment and natural resource endowment as independent variables and the stock of FDI as the dependent variable. Analyzed data was between 1991 and 2012. The study's findings showed that trade openness, inflation, and infrastructure facilities were the most crucial determinant factors of foreign direct investment to EAC countries. This study

however did not take into account public debt as one of the factors that influence FDI inflows.

2.4.2 Local Studies

Kinaro (2006) investigated the determinant factors of foreign direct investment in Kenya. Identifying the key factors that influence FDI decisions was the main objective of the study. In analyzing the various variables included in the model, the researcher used econometric technique. In the examination of the locational factors of FDI inflows to Kenya, it was proposed that human capital, annual inflation, real exchange rate and economy openness are exogenous variables. Johansen co-integration technique was used to establish the co-integration of the series and it was robust. FDI is affected positively in the short run economic openness and human capital as per the findings. Besides both real exchange rate and inflation have negative impacts FDI inflows in long and short run respectively. This study however failed to address public debt as a determiner of FDI inflows and that is the gap the current study seeks to fill.

Nyamwange (2009) conducted a research study to find out determinants of FDI in Kenya. Objective of the research was to determine factors which influence FDI decisions in the Kenyan context. He explored the correlation between FDI and economic development in Kenya. Findings evidenced that FDI is influenced by level of human capital, stable macroeconomic policies, taxation, and market size. Further, no statistically significant link occurs between human capital and GDP implying that in Kenya there inadequacy of employees who are skilled. This study focused on different concepts as it did not take into account public debt and this is the gap the current study will leverage on.

Matiti (2013) examined the effect of selected determinants on public debt in Kenya. This study used 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. It was concluded that there is a direct relationship between public debt and rates of exchange, 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. This study is different from the current study as it focused on public debt as the dependent variable while the current study will have FDI inflows as the dependent variable and public debt as the independent variable.

Muinga (2014) examined external public debt and economic growth in Kenya. The study used data from 1970 to 2010 from World Development Indicators and KNBS. The explanatory variables were capital, labour, and interest payments on external debt, external public debt, debt service payments, and inflation. The econometric technique of OLS was employed in the data analysis. The results indicated that external debt and interest payments on external debt payments contribute negatively to Kenya's economic growth. Capital formation and labour force have a notable positive contribution to the growth of the economy. The simulation results showed that any percentage increase of external debt holding other factors constant, will reduce the GDP hence slow economic growth. The current study will be different from this study as it will focus on FDI inflows instead of economic growth.

Wabwalaba (2017) sought to establish the influence of public debt on FDI inflows in Kenya. The independent variable was public debt as measured by quarterly public debt in natural logarithm form. The control variables were inflation rates as measured by quarterly CPI, exchange rates as measured by quarterly exchange rate between KSH/USD and economic growth as measured by quarterly GDP. 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. The results revealed that individually, public debt, inflation rates, exchange rates and economic growth are not significant determiners of FDI inflows in Kenya.

2.5 Conceptual Framework

According to economic theory, external 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. 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.

Figure 2.1: The Conceptual Model

Independent variable   **Dependent variable**

```
┌─────────────────────────┐
│ External  Government    │
│                         │
│ Borrowing               │
│                         │          ┌──────────────────────────┐
│ (Log external debt)     │─────┐    │ FDI Inflows              │
│                         │      ╲   │                          │
│                         │       ╲  │ (Quarterly FDI Inflows)  │
└─────────────────────────┘        ╲ │                          │
┌─────────────────────────┐        ╱ └──────────────────────────┘
│ Economic Growth         │       ╱
│                         │      ╱
│ (GDP growth rate)       │─────┘
│                         │
│ Inflation               │
│                         │
│ (CPI)                   │
└─────────────────────────┘
 Control variables
```
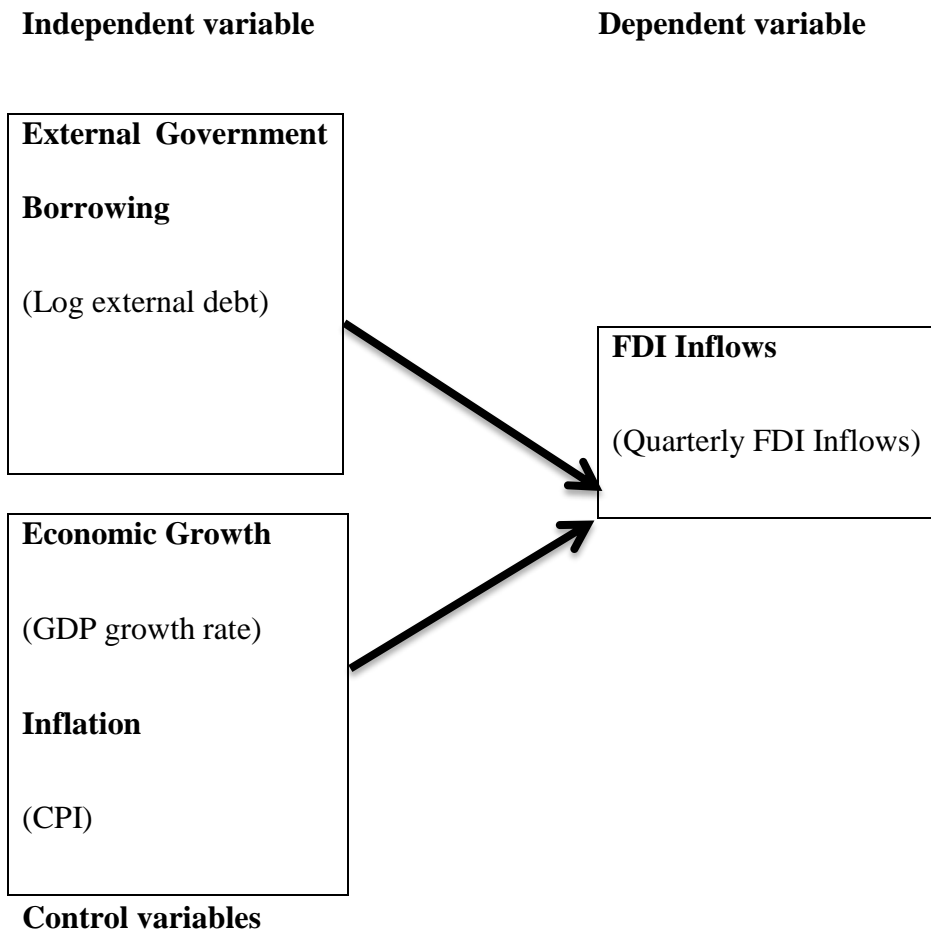
Source: Researcher (2018)

The conceptual model developed portrays this expected relationship between the study variables. The factors characterized here are external government borrowing and foreign direct investment inflows. The independent variable is external government borrowing as measured by the natural logarithm of external government borrowing. The control variables are inflation rates as measured by quarterly inflation rate and economic growth as measured by quarterly GDP growth rate. Foreign direct investment inflows are the dependent variable which the study seeks to explain and will be measured by quarterly FDI inflows.

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2.6 Summary of the Literature Review

Many theoretical frameworks have attempted to explain the idea of public debt and foreign direct investment inflows. Debt overhang theory, internalization theory and the eclectic paradigm theory are the four theories discussed in this theoretical review. Some of the key determining factors of foreign direct investments have been discussed in this section as well. Many empirical studies have been carried out, globally and locally, on public debt and FDI. This chapter also discusses the results of these studies. The lack of consensus among the various scholars on the impact of public debt on foreign direct investments is reason enough to conduct further examination on the area of study. In addition, much of the studies conducted in the local context have focused on selected macro-economic variables that determine FDI inflows without focusing on public debt. The other studies conducted on public debt have mostly related it to economic growth. The current study intends to fill this research gap by addressing the research question: What's the effect of external government borrowing on foreign direct investment in Kenya

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In order to determine the relationship between external government borrowing and foreign direct investment inflows in Kenya, a research methodology is necessary to outline how the research will be carried out. This chapter has four sections namely; research design, data collection, diagnostic tests and data analysis.

3.2 Research Design

A descriptive research design was employed to investigate the relationship between external government borrowing and FDI in Kenya. Descriptive design was utilized as the researcher is interested in finding out the state of affairs as they exist (Khan, 2008). This research design was appropriate for the study as the researcher is familiar with the phenomenon under investigation but want to know more in terms of the nature of relationships between the study variables. In addition, a descriptive research aims at providing a valid and accurate representation of the study variables and this helps in responding to the research question (Cooper & Schindler, 2008).

3.3 Data Collection

Data was exclusively collected from a secondary source. The study will use secondary data from KNBS publications. The quantitative data collected included total FDI remittances into Kenya from 2008 to 2017 collected on a quarterly basis. Data on external government debt, inflation which was the CPI and economic growth which was Kenya's GDP growth rate was collected from KNBS from January 2008 to December 2017 on a quarterly basis.

3.5 Diagnostic Tests

Linearity show that two variables X and Y are connected through a mathematical equation Y=bX in which b is a constant number. The linearity test was obtained through the scatterplot testing or F-statistic in ANOVA. Stationarity test is a process where the statistical properties such as mean, variance and autocorrelation structure do not change with time. Stationarity was obtained from the run sequence plot. 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 complete linear dependence between them and as it approaches to zero then the multicollinearity becomes more intense. Variance Inflation Factors (VIF) and tolerance levels were also carried out to show the degree of multicollinearity (Burns & Burns, 2008).

3.6 Data Analysis

The data collected from KNBS was organized in a manner that can help address the research objective. SPSS computer package version 21 will be used in the analysis since it's more user-friendly. The data was then inputted into the SPSS and examined by use of descriptive, correlation and regression analyses. In descriptive statistics,

standard deviation, scatter plot and mean were used. In inferential statistics, both regression and correlation analysis were carried out. Correlation analysis involved determining the extent of relationship between the study variables while regression analysis will involve establishing the cause and effect between the independent and dependent variables. A multivariate regression analysis was employed to determine the association between the dependent variable (FDI inflows) and independent variables: External government borrowing, inflation rate and economic growth.

3.6.1 Analytical Model

Using the collected data, the researcher conducted a regression analysis to establish the extent of the relationship between external government borrowing and foreign direct investments. The study applied the following regression model:

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

In which: Y = Foreign direct investment inflows as measured by natural logarithm of

FDI inflows on a quarterly basis

β_0 = y intercept of the regression equation.

β_1, β_2 and β_3, = are the regression slope

X_1 = External government borrowing as measured by the natural logarithm of

external government borrowing on a quarterly basis

X_2 = Average quarterly inflation rate as measured by inflation rate

X_3 = Economic growth as measured by quarterly GDP growth rate

ε = error term

3.6.2 Tests of Significance

The researcher will carry out parametric tests to establish the statistical significance of both the overall model and individual parameters. F-test was applied in determining the significance of the overall model and it was obtained from Analysis of Variance (ANOVA) while a t-test was used to establish statistical significance of individual variables.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

The chapter represents the study results and findings in accordance to the research objective. It focused on the analysis of collected data from CBK and KNBS to establish the effect of external government borrowing on foreign direct investments in Kenya. Using descriptive statistics, correlation and regression analysis, the study results 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[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
External government borrowing	.178	40	.300	.881	40	.723
Inflation rates	.173	40	.300	.918	40	.822
Economic Growth	.176	40	.300	.892	40	.784
a. Lilliefors Significance Correction						

Source: Research Findings (2018)

The researcher carried out diagnostic tests on the collected data. A test of Multicollinearity was undertaken. Tolerance of the variable and the VIF value were used where values more than 0.2 for Tolerance and values below 10 for VIF implies that Multicollinearity doesn't exist. Multiple regressions is applicable if strong relationship among variables doesn't exist. From the findings, all the variables had a tolerance values >0.2 and VIF values <10 as shown in table 4.2 showing that Multicollinearity among the independent variables doesn't exist.

Table 4.2: Multicollinearity Test for Tolerance and VIF

Variable	Collinearity Statistics	
	Tolerance	VIF
External government borrowing	0.340	1.326
Inflation rates	0.398	1.982
Economic growth	0.392	1.463

Source: Research Findings (2018)

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 4.3 below shows the descriptive statistics for the variables applied in the study.. FDI inflows had a mean of 49.695 with a standard deviation of 36.252. External government borrowing recorded a mean of 12.423 with a standard deviation of 0.225. Economic growth resulted to a mean of 6.215 with a standard deviation of 3.488 while Inflation had a mean of 8.556 and standard deviation of 3.721.

Table 4.3: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
FDI inflows	40	17.480	210.920	49.69500	36.251814
External debt	40	12.1	12.8	12.423	.2247
Inflation rate	40	4.030	16.830	8.55850	3.720589
Economic growth	40	.300	12.500	6.21500	3.487895
Valid N (listwise)	40				

Source: Research Findings (2018)

4.4 Correlation Analysis

Pearson correlation was employed to analyze the level of association between FDI inflows and the independent variables for this study (external government borrowing, economic growth and inflation rates). From correlation analysis, the study showed the existence of a strong positive and significant correlation between external government

borrowing and FDI inflows into the country (p=.743, p<.005). This goes to show that the level of external government borrowing in a country has a significant association with FDI inflows into the country.

Table 4.4: Correlation Analysis

		FDI inflows	External debt	Inflation rate	Economic growth
FDI inflows	Pearson Correlation	1	.743**	-.798**	.152
	Sig. (2-tailed)		.000	.000	.350
	N	40	40	40	40
External debt	Pearson Correlation	.743**	1	.632**	.083
	Sig. (2-tailed)	.000		.000	.612
	N	40	40	40	40
Inflation rate	Pearson Correlation	-.798**	.632**	1	-.092
	Sig. (2-tailed)	.000	.000		.571
	N	40	40	40	40
Economic growth	Pearson Correlation	.152	.083	-.092	1
	Sig. (2-tailed)	.350	.612	.571	
	N	40	40	40	40

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Research Findings (2018)

The relationship between economic growth and FDI inflows was found to be weak, positive and insignificant (p=.152, p>0.005). This implies that movement in economic growth is positively correlated to FDI inflows but not in a significant manner. The study also showed that the relationship between inflation and FDI inflows was strong

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and negative (p=-.798, p<0.005). This implies that movement in the inflation rate is negatively correlated to FDI inflows and in a significant manner.

4.5 Regression Analysis

FDI inflows were regressed against three predictor variables; external government borrowing, economic growth and inflation rates. The study obtained the model summary statistics as shown in table 4.5 below.

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.803[a]	.644	.615	22.507375	1.966

a. Predictors: (Constant), Economic growth, External debt, Inflation rate

b. Dependent Variable: FDI inflows

Source: Research Findings (2018)

From the outcome in table 4.5 above, R^2 value was 0.644, a discovery that 64.4 percent of the deviations in FDI inflows into the country are caused by changes in external government borrowing, economic growth and inflation rates. Other variables not included in the model justify for 35.6 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 .803. A durbin-watson statistic of 1.966 indicated that the variable residuals were not serially correlated since the value was more than 1.5.

From the analysis of variance, the significance value is 0.000 which is less than p=0.05. This implies that the model was statistically significant in predicting how external government borrowing, economic growth 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 21.725, confirming that overall the multiple regression model is statistically significant, in that it's a suitable prediction model for explaining how external government borrowing, economic growth and inflation rates affects FDI inflows in the country.

Table 4.6: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	33016.616	3	11005.539	21.725	.000[b]
	Residual	18236.950	36	506.582		
	Total	51253.566	39			

a. Dependent Variable: FDI inflows

b. Predictors: (Constant), Economic growth, External debt, Inflation rate

Source: Research Findings (2018)

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 4.7

Table 4.7: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-236.373	596.502		-.396	.694
	External debt	18.984	50.268	.118	.378	.708
	Inflation rate	-6.616	3.039	-.679	-2.177	.036
	Economic growth	1.027	1.175	.099	.874	.388

a. Dependent Variable: FDI inflows

Source: Research Findings (2018)

From the above results, it is evident that of the three selected independent variables, only inflation rate produced statistically significant values for this study as shown by a high t value and a p value that was less than 0.05. This implies that inflation rate have a negative and statistically significant effect on FDI inflows while external debt and economic growth produced positive but statistically insignificant values for this study as shown by p values greater than 0.05.

The following regression equation was estimated:

$Y = -236.373 - 6.616X_1$

Where,

Y = FDI Inflows

X_1 = Inflation rates

On the estimated regression model above, the constant = -236.373 reveals that if selected dependent variables (external government borrowing, economic growth,

foreign and inflation rate) were rated zero, FDI inflows would be -236.373. A unit increase in inflation would lead to a decrease in FDI inflows in the country by 6.616 while the rest of the variables (external government borrowing and economic growth) were found to be statistically insignificant determiners of FDI inflows in Kenya.

4.6 Discussion of Research Findings

The study aimed at determining the impact of external government borrowings on FDI inflows in the country. The independent variable was external government borrowing as measured by total external government borrowing on a quarterly basis. The control variables were economic growth as determined by quarterly GDP growth rate and inflation rates as measured by quarterly CPI. FDI inflow 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 strong positive and significant correlation between external government borrowing and FDI inflows into the country. The relationship between economic growth and FDI inflows was found to be weak, positive and insignificant. The relationship between inflation and FDI inflows was found to be strong and negative. This implies that movement in inflation rates is negatively correlated to FDI inflows and in a significant manner

The model summary revealed that the independent variables: external government borrowing, economic growth and inflation explains 64.4% of changes in the dependent variable as indicated by the value of R^2 which means there are other factors this model doesn't include that account for 35.6% of changes in FDI inflows

in Kenya. The model was found to be fit at 95% level of confidence since the F-value of 21.725 is higher than the critical value. This implies that overall the multiple regression model is statistically significant, in that it's a suitable prediction model for explaining FDI inflows in Kenya.

The findings of this study are in agreement with Udomkerdmongkol, Gorg and Morrissey (2013) who 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 gave 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 foreign debt financing have no impact on investment. This study was carried out in a different context and its findings may not be applicable in the Kenyan context.

This study is in agreement with Wabwalaba (2017) who sought to establish the influences of public debt on FDI inflows in Kenya. The independent variable was public debt as measured by quarterly public debt in natural logarithm form. The control variables were inflation rates as measured by quarterly CPI, exchange rates as measured by quarterly exchange rate between KSH/USD and economic growth as measured by quarterly GDP. 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. The results revealed that individually, public debt, inflation rates,

exchange rates and economic growth are not significant determiners of FDI inflows in Kenya.

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 external government borrowing on FDI inflows in Kenya. The independent variables for the study were external government borrowing, 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 2008 to December 2017.

From the results of correlation analysis, a weak positive correlation was found to exist between external government borrowing and FDI inflows in Kenya and the correlation was significant as indicated by a p value less than 0.05. The relationship between the control variables inflation and FDI inflows in Kenya was found to be strong, negative and significant. Economic growth exhibited a weak positive and insignificant correlation with foreign direct investment inflows as shown by a p value that was more than 0.05.

The co-efficient of determination R-square value was 0.644 which meaning that about 64.4% of the variation in FDI inflows in Kenya can be explained by the three selected independent variables while 35.6 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=0.803). ANOVA results show that the F statistic was significant at 5% level with a p=21.725. Therefore the model was fit to explain the relationship between the selected variables.

The regression results show that when all the selected dependent variables (external government borrowing, economic growth and inflation) are rated zero, FDI inflows in Kenya would be --236.373. A unit increase in inflation would lead to a decrease in FDI inflows in the country by 6.616 while the rest of the variables (external government borrowing and economic growth) were found to be statistically insignificant determiners of FDI inflows in Kenya.

5.3 Conclusion

Based on the study results, the conclusion given is that FDI inflows in Kenya have a positive association with external government borrowing. The study therefore concludes that higher external government borrowing lead to improved FDI inflows in the country even though not to a significant extent. Economic growth was also found to be positively related to FDI inflows in the country and therefore an increase in economic growth leads to an increase in FDI inflows in the country. The study found that inflation rate had a negative and significant correlation with FDI inflows in the country and we can therefore conclude that higher inflation rates tend to discourage foreign direct investment inflows in Kenya.

This study concludes that independent variables selected for the study external government borrowing, economic growth and inflation influence FDI inflows in the country to a significant extent as they account for 64.4 percent of the changes in FDI

inflows in the country. The fact that the three independent variables explain 64.4% of changes in FDI inflows in Kenya imply that the variables not included in the model explain 35.6% of changes in FDI inflows in the country. The overall model was found to be significant as explained by the F statistic. It is thus sufficient to draw a conclusion that these variables significantly affect FDI inflows in the country as revealed 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. 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 proof of a relationship between external debt financing and domestic investment in both regimes. Findings establish that foreign debt financing doesn't affect investment

5.4 Recommendations

The study established that although there is a positive influence of external government borrowing 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. Growth in the economy was also found to have a positive impact on FDI inflows and therefore this study recommends that policy makers should develop measures to boost economic growth as it attracts foreign direct investments.

The study found that inflation rates have a negative impact on FDI inflows in the country. This study recommends that policy makers should regulate prevailing inflation rates as high inflation rates may lead to decreased FDI inflows into the

country. A decline in FDI inflows will in effect slow down the economic growth in the country which has spiral effects on development.

5.5 Limitations of the Study

The scope of this research was for ten years 2008-2017. 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 2017. A longer study period is more reliable as it will take into account major economic conditions such as booms and recessions.

Data quality is one of the study limitations. From this research, it is hard to conclude whether the results 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 used secondary data that had already been obtained and was in the public domain, unlike the primary data which is first-hand. 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

The study focused on external government borrowing and FDI inflows in Kenya and relied on secondary data. A research study where data collection depends 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 wasn't exhaustive of the independent variables influencing FDI inflows in Kenya and it's recommended that further studies be carried out to incorporate other variables like interest rates, exchange rates, money supply, 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 help confirm or disapprove this study's fresults. 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 imperfections 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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APPENDICES

Appendix I: Data Collection Form

Year	Quarter	FDI inflows	External public Debt	GDP growth rate	CPI	GDP