PUBLIC DEBT AND FOREIGN DIRECT INVESTMENT IN KENYA

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International Academic Journal of Economics and Finance (IAJEF) | ISSN 2518-2366

Received: 19th November 2021

Published: 22nd November 2021

Full Length Research

Available Online at: https://iajournals.org/articles/iajef_v3_i7_351_368.pdf

Citation: Awuor, O. C., Kashu, D., Kamande, M. J., Kilonzo, M., Ruth, W., Musau, A. (2021). Public debt and foreign direct investment in Kenya. *International Academic Journal of Economics and Finance, 3(7), 351-368.*

ABSTRACT

Restoration of economic wellbeing is one of the key efforts governments are undertaking in post-COVID era. This is due to the fact that, economies have experienced an increase in debt levels which affect their interactions in the world economy. Many of world economies have entered into recession and others experienced a devaluation of currencies even as debt levels skyrocket. Kenya has experienced an increase in debt levels increasing beyond the World Bank standard coupled with a decline in Foreign Direct Investment (FDI) levels as multinational companies scale down investments and others exit the markets all together. The big question is therefore, is the increase in debt levels a contributor to declining FDIs? This study focused on the analysis of the effect of public debt on foreign direct investment inflows in Kenya. The main purpose of the study was to determine the Impact of public debt on Foreign Direct Investments and the specific objectives included to analyze the effect of Gross financial liabilities on Foreign Direct Investment inflows in Kenya, to determine the effect of public debt to GDP ratio on Foreign Direct Investment, to analyze Interest Rate on Foreign Direct Investment and to determine the effect of debt budgetary revenue on Foreign Direct Investments. Secondary sources of data were sourced from reports by the World Bank, IMF, UNCTAD, Kenya National Bureau of Statistics, CBK, and National Treasury. Our study used the descriptive study design since we sought to elaborate the relationship between public debt and Foreign Direct Investment inflows in Kenya. Multiple regression analysis on available data found out that all the independent variables (Gross Financial Liabilities, Public Debt to GDP Ratio, Interest Rate and Debt Budgetary Revenue) were statistically insignificant. The R-Square value was 0.401 meaning that only 40.1% variation in FDI inflows in Kenya can be determined by public debt while the other part is determined by factors not covered in this research. The findings also indicated a high R of 0.633 indicating that public debt has a high correlation to FDIs. An individual analysis of each variable found out that Public Debt to GDP Ratio and Interest Rate had a positive correlation with Foreign Direct Investment while Gross Financial Liabilities and Debt Budgetary Revenue had a negative correlation. The study therefore recommends that the government should develop and execute policies to regulate the Gross Financial Liabilities in order to encourage inflows of FDI and also reduce deficit budgeting (expenditure exceeds revenue) which leads to excessive borrowing and this in turn discourages inflow of FDI.

Key words: Public debt, Foreign Direct Investments, Interest rates, Total Debt

INTRODUCTION

Public borrowing refers to how much the government borrows and floats loans either internally or externally from banks, individuals, countries or international loan giving institutions (Muley, 2010). Total external debt stock of low and middle income countries rose to 5.3% in 2018 to $7.8tn almost half the rate of accumulation 10.4% recorded in 2017(world bank debt report 2020). The 2018 increase in debt was dominated by China which accounted for 80% of combined debt. In Europe and Central Asia, long-term debt outcomes were largely dictated by Russia by public sector borrowers resulted in long-term debt of $61bn as compared to inflow of $21bn in 2017(UNCTAD Report 2020). Over the period of 2010-2018, the average public debt increased by half from 40% to 59% of GDP making Sub-Saharan Africa the fast growing debt accumulation Continent (World Bank global economy). According to International Monetary Fund (IMF), African governments are pulling on debt without evaluating the exchange rate risks and real costs of repaying the debts. Debt level on the continent is way below the 100% debt to GDP ratio mark. Apart from Congo, Djibouti, Mozambique and Cape Verde, all other countries in Africa have debt to GDP ratio averaging 60% (IMF report). In North Africa, net debt inflows in the region rose by 5% in 2018 to $24.2bn with a $3.1bn contraction in short term debt and 25% increase in long-term debt to $27.3bn. In sub-Saharan Africa, South Africa is the region's largest borrower accounting for 31% of combined external debt stock in 2018 (World Bank debt report 2020). The rise in external debt outpaced economic growth in many sub-Saharan countries over the past decades.

Public Debt in Kenya

Kenya's borrowing has significantly changed through increased borrowing from external commercial sources such as Eurobonds. In November 2017, total financial liabiltiies in Kenya have been escalating increasingly with an estimate of 22.2% to ksh4.6tn from ksh3.8tn in November 2016. In the five years from 2013-2017, average growth rate of Kenya's debt burden was at 21.3% up from 2008-2012 average of 15.1% (World Bank). The current debt is at 7.12tn as at 2020. This is a concern when compared to growth in rates of GDP noted to be growing by 5.9% over the last 7years.

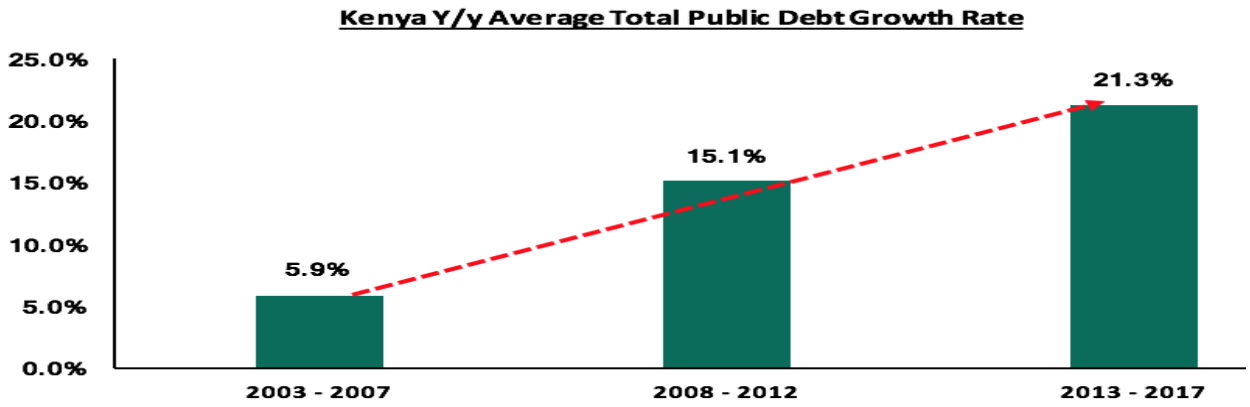


Fig 1
Source: World Bank

Having lent Kenya, a total of 520bn in 2017 December, China is still its biggest consensual lender. Foreign debt from commercial banks has also risen to 30.7% in September 2017 (Cytton report) from 20.3% in 2015 March. In 2019, Kenya's ratio of debt to GDP was approximated to be 62.1% which is exceeding the Recommended IMF threshold of 50.0%. Conferring to ditch assessment, covid-19 shock is predicted to delay the fiscal debt narrowing. 70.0% of GDP is the debt forecasted in 2021 due to rising debt levels. This is evident with the governments' treasury report indicating willingness of the government to issue another euro bond to address green financing.

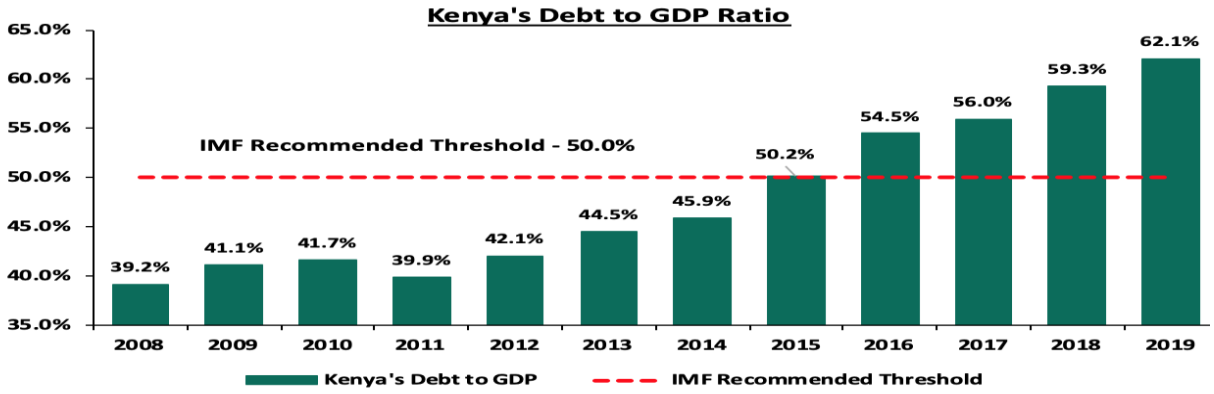


Fig 2

Source: World Bank

Foreign Direct Investment

FDI is an outlay by an individual or a firm in a nation in sectors of business with trade concern in a different country (Chen 2021). According to UNCTAD, global FDI in 2020 collapsed dropping by 42% ($1.5tn to $ 859bn) in 2019. The report conferred that, in developed nations the decrease in FDI was intense, flows fell by 69% which is about $229bn due to covid-19. Global FDI slid by 13% in 2018 to USD 1.3tn in the previous year with contraction largely participated by United States Multinational Enterprises (MNEs). Japan was the largest investor followed by China and France.

There was a decrease in FDI inflows in North Africa by 11% to $14bn as a result of a reduction in inflows in all countries excluding Egypt. FDI in the sub-Saharan decreased to $32bn by 10% in 2019 after significant rise in 2018. South African's FDI in 2019 reduced by 15% to$4.6bn. Central Africa received FDI inflows of $8.7bn marking a decline of 7%. That of West Africa declined to $11bn by 21% in 2019(World Bank). Similarly, East Africa's flows also fell to $7.8bn by 9% as FDI in Ethiopia constricted to $2.5bn by a quarter.

Foreign Direct Investment in Kenya

UNCTAD's 2020 world investment report, in 2019 FDI inflows in Kenya fell to USD 1.3bn by 18% compared to 2018 where the inflows were USD 1.6bn. FDI stock stood at USD 15,7bn in 2019.In order to attract FDI, the government has been dynamically taking certain

measures; the downward trend is evidenced in Kenya when matched to her neighboring countries as investors from other countries now skip Kenya to more business conducive and friendly destination countries like Rwanda, Uganda and Tanzania (Kemunto 2013). Despite the economy being largest in East African nations with a GDP of 40% over the past years, in FDI attraction terms, it performed poorly with per capita inflows being lesser than in other EAC

Foreign Direct Investment: USD mn: Annual: Kenya

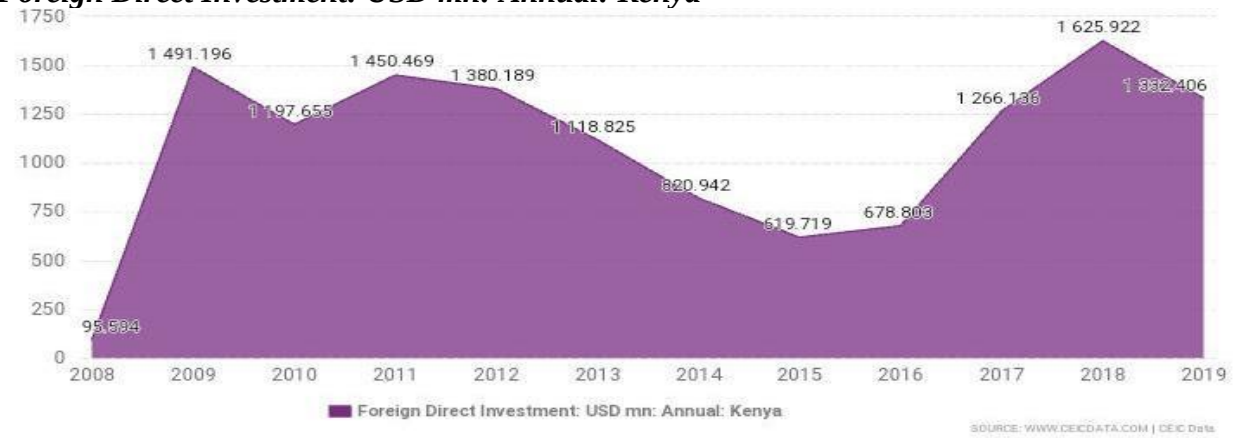


Fig 3

Source: www.ceicdata.com | ceic data

Foreign Direct Investment (FDI) and Public Debt

According to study conducted by Cornel Kiprotich (2015), there exists a correlation between FDI and Public debt. External borrowing has substantial undesirable effects on FDI. Investor's vision was shattered by increasing the debt size and these generated negative prospects of future economy. Study by Wamboye (2012) found that relatively high debts from outside the country depress growth of the economy irrespective of the debt nature. Krugman (1998) postulated the theory of debt overhang vividly demonstrating the manner in which accrual of public debt causes a reduction in inflows of FDI transforming to sluggish growth of the economy.

Ostadi *et al*. (2014) argues that external borrowing Implicates to an extraordinary adverse impact on FDI and that added foreign debt has destroyed the investor's vision and resulted in undesirable upcoming economic anticipations that have reduced the ventures in the country. The findings further indicated that the government size significantly reduces FDI which reduces in correspondence to repulsions of crowding out and this elaborates that the existence of government lessens privatized businesses and institutions. Udomkerdmongkol, Gorg and Morrissey (2013) conducted research and found that investment is not in any way influences by foreign debt. It's therefore important to conduct further studies in determining the corelation between FDI and Public debt and the effects of public debt on FDI inflows in Kenya.

As debt to GDP ratio escalates, the probability of a country repaying its debt is lowered and this indicates default at a higher threat. According to World Bank research report, adverse sway on economic growth (corporate finance institute) results from a ratio exceeding 77% for a prolonged period. The ratio is at 70.46%. FDI stock measures at a given point in time, the total level of direct investment commonly approximated annually or quarterly. The value of resident investor's net loans and equity to enterprises in foreign nations is the outward FDI stock, while the value of foreign investor's equity in and net loans to enterprises resident in reporting economy is the inward FDI stock. Respective FDI stock is unitized in USD currency and as a GDP share (OECD data). The average for 2019 based on 177 countries was 4.08% of GDP (World Bank).

Statement of the Problem

FDI is a straight business investment conducted by an individual or a firm in one country, business interests oriented in another country (Chen 2021). It inaugurates efficient control of high level substantial influence over foreign business decision making. An inclination in FDI inflows is essential for achievement of sustained development and growth. GDP depends greatly on capital inflows into the economy with FDI being the most likely reliable capital inflows. Net FDI of percentage GDP in Kenya was at 1.4% in 2019 (Knoema). Government of Kenya has been keenly employing measures to implement modifications to draw FDI such as making deadline with construction permits more transparent. The government proclaimed Kenya Investment Policy, the development of projects to facilitate creation of a friendly environment for progressed number of investments. An Info Trade Kenya portal- a website based platform implemented by Kenya trade in partnership with UN conference on trade (UN).

Considering the size of Kenya’s economy and the levels of its development, FDI inflows stays pretty weak. Despite its economy being largest in East Africa n Counties (EAC) with 40% of the region GDP over the past years in terms of FDI attraction it performed poorly being lower than in other African countries (CEIC Data 2019). The latest world investment report 2020 by UNCTAD shows that FDI in East Africa declined by 9% to $7.8bn in 2019 from $9bn in 2018. Inflows to Uganda increased by 20% to $1.3bn due to continued development in oil field. Inflows in Tanzania remained largely unchanged at $1.1bn, However, FDI entries to Kenya dropped to $1.3bn by 18% compared to $1.5bn in 2018. Despite the measures undertaking various macroeconomic restructurings by the government, the country has failed regardless to attract sufficient FDI. Public debt has been rising steadily over the past years by 22.2% in November 2017 to Ksh4.6bn from Ksh3.8bn in November 2016(IMF report). The World Bank initiate that if public debt to GDP ratio goes beyond 77% for a lengthy period it slows down the growth of the economy, currently the percentage proportion is at 70.46%.

Kiprotich (2015) did a study on the effects foreign debt and public debt affect FDI, this research focuses only on public debt effects on FDI. Wamboye (2012) studied the effects external debt and trade on FDI, our research focused on public debt and how it affects FDI.

Khan (2011) studied the effects of FDI on economic growth. This study focused on FDI as depended variable instead. Ostadi (2011), studied the effects of external debt and government size on FDI while this study did not consider government size. Udomkerdmongkol *et al.*, (2013) studied the effects domestic investments and FDI have on external debt, this study addressed public debt as an independent variable while FDI as the dependent variable. Since FDI levels in Kenya continue decline, this study sought to find out the effects of public debt on FDIs.

Objectives of the study

General objective

To determine the effect of public debt on Foreign Direct Investment (FDI) in Kenya

Specific Objectives of the study

i. To analyze the effect of Gross financial liabilities on Foreign Direct Investment inflows in Kenya.
ii. To determine the effect of public debt to GDP ratio on Foreign Direct Investment in Kenya
iii. To analyze the effect of Interest Rate sensitivity on Foreign Direct Investment in Kenya
iv. To determine the effect of debt budgetary revenue on Foreign Direct Investments in Kenya

Scope of the Study

The main objective of this study was to examine effects of public debts on FDI (Foreign Direct Investment) in Kenya. The study focused on gross financial liabilities, public debt to GDP ratio, and interest rate sensitivity and debt budgetary revenue as measures of public debt while FDIs were measured using investment amount in USA dollars. The study is done in Kenya and factors on relevant information for the periods 2010 to 2019. The populace of this research consisted of all Foreign Direct Investors Inflows in Kenya during the period between the year 2010 and 2019. The study adopted a descriptive research design.

Significance of the study

The importance of the study is that it will aid the government in making of policies. The outcomes of the study equip the government in developing strategies to attract robust and high number of FDI inflows in attainment of its objectives. The study will provide understanding of how public debt affects FDI inflows in Kenya and also provide recommendation on how the government can control public debt. This study contributes to analysis of public debt as a macroeconomic variable which will help us realize its relationship to its causal factors such as investment that result in either positive or negative direction. The

study findings were beneficial to researchers and intellectuals in documentation of further research topics connected to this study and also be reference material for future researchers.

Limitations of the Study

The study was limited to public debt and its effects to Foreign Direct Investments in the economy of Kenya. This study can be improved by including domestic debt which influences capital building to natives of a country. The study included data collected from secondary sources that is the Central Bank of Kenya, World Bank, UNCTAD, IMF, OECD data and data related to FDI and public debt which was only quantitative in nature. Qualitative data should be factored in as it also influences FDIs levels at exploratory levels. A time series analysis was done for a period a period of 10 years. A longitudinal study should be done to understand the individual behaviour of variables in the period of study or a triangulation of the methods to investigate generalizability of the study.

LITERATURE REVIEW

Introduction

Hypothetical outline used in reviews, researches, carried out on public debt and FDI are contained in this chapter. Theoretical framework, empirical view, conceptual framework, research gap and the summery of the literature review are discussed.

Theoretical framework

The framework gives relevant theories to the study of the effect of public debt on (FDI). Theories include the Ricardian Equivalence Theory, modern theory of public debt, classical theory of public debt, and government debt in Solow model with human capital.

Ricardian Equivalence theory

David Ricardo developed this theory and later Harvard professor Robert Barro elaborated it. Ricardian equivalence postulates that financing government expenditure from present taxes or future taxes (and current deficits) equates to effects on the entire economy. By increasing debt-financed government spending trying to enhance an economy will not be effective since consumers and investors comprehend that there will be future taxes on debt to be paid. This is supported by Ikiz (2020) who states that according to this theory, whatever is earned in the present is offset by higher taxes in the future and as a result, the government expenditure cannot stimulate consumer spending. Hayo and Neumeier (2017) state that the above tax cuts will result to crowding out of private consumption which reduces the effectiveness of governments' fiscal policy. This theory was vital in our study is it adressed the variable budgetary revenue which is partly financed by tax collected by the government as part of its fiscal policy agenda

Debt Overhang Theory

This theory was developed by Krugman (1988) who defined debt overhang as the anticipated current value of any anticipated resource allocation that is not up to its outstanding loan. According to him, there is a negative relationship between foreign debt and investment which results into a lower capital formation in any economy (Abdulahi, Bakar and Hassan, 2016). This was supported by Jeffery Sachs (1988) who states that overhang of external debt to private investors hinder effectiveness of International Monetary Fund conditionality. The theory is also supported by Villanueva (1991). Arslanalp and Henry, 2004) advanced the idea of debt overhang by stating that, debt poverhang does not only occur when economies accumulate debt bu can as well occur due to poor economic policies or adverse economic shocks. This theory was of help in adressing the question, how should Kenya keep on borrowing before the rate becomes adverse to its economic wellbeing interms of investment levels and research which is important issue adressed under this research.

Internationalization Theory

This theory was developed by Coase (1937) who stated that multinational enterprises emerge when benefits of internalization exceed the costs of the same. This theory was advanced by Casson and Buckley (1976) to explain growth of multinational companies and what motivates them e.g. comparative advantage and competitiveness. According to Rugman and Verbeke (2008) the internationalization theory explains the existence and functioning of multinational enterprises. The purpose of this theory in our research was to address the issue on why multinational companies have continued to scale down on their FDIs in Kenya as others shut down all together.

Empirical Review

Several researches have been done to determine the connection between Public Debt and Foreign Direct Investment. The following are some of the studies done by different scholars. Wabwalaba (2017) did a study on the effects of public debt on FDIs inflows in Kenya. He utilized some control variables including GDP, exchange rate and inflation rates. His study used descriptive research design and multiple linear regression model of analysis with help of SPSS version 21. He found out that public debt is not significant in explaining FDIs levels in the country. They recommended that governments need to regulate public debt has it has a negative influence on FDI levels. This was supported by Musyoka, Ndanu, and Ocharo (2018), Kiprotich (2015), Ostadi and Ashja (2014), Waweru (2018), and Khan and Khan (2011). This indicates that public debt influences FDIs negatively and hence calls for a need to regulate increase in public debt levels.

However, Oche (2016), did a study on the effects of public debt on FDIs in South Africa 1983-2011; An empirical analysis. The study used Vector error correlation model and the results indicated a positive relationship between public debt and FDIs. This indicated that public debt should increase for FDIs to increase. This was supported by Salamatu, Forna and

Yuehua (2017) which contradicts the previous findings on public debt and FDIs. In light of the above, other researchers have related public debt to economic growth. for example, Kwoba and Kosimbei (2015) in their study "Effects of Public Debt on Economic Growth in East African community" used Random effects model as per the results of Hausman test. Their study findings indicated that external debt has a negative effect on economic growth. Their study recommended that governments should develop policies aimed at reducing public debt for economic growth. It is as a result of the above that advancement in research has been done to address the relationship between public debt, FDIs, economic growth and investments as shown below.

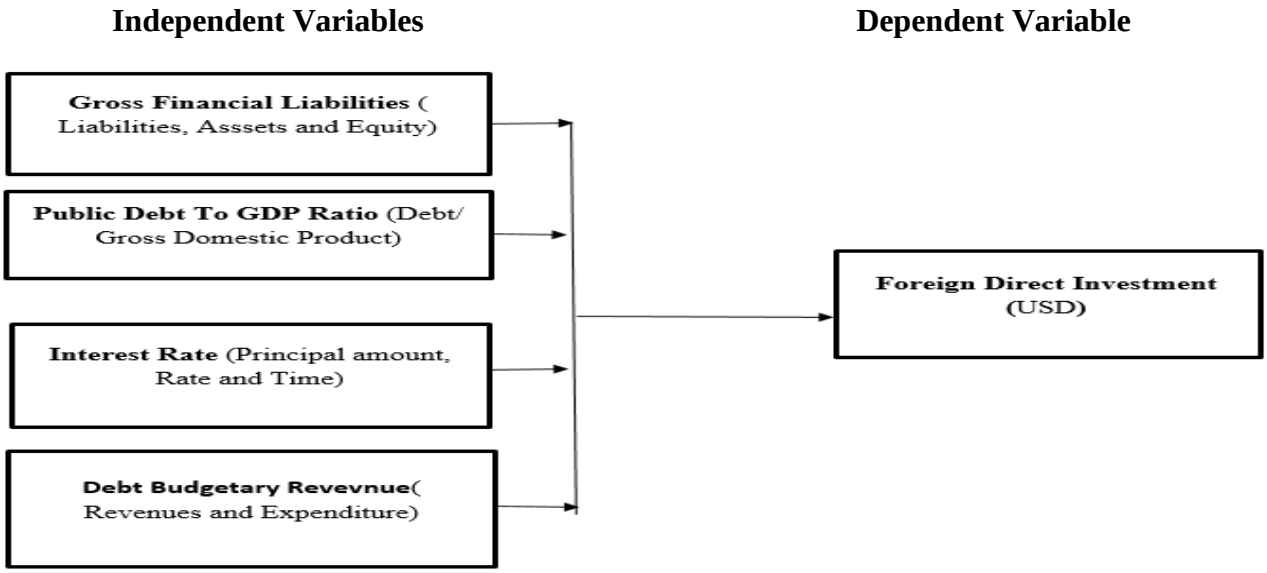
Jilenga, Xu and Dacka (2016) did a study on the effects of external debt and FDI on economic growth; an empirical evidence from Tanzania. Their study used time-series data analysis using ARDL model and bounds test approach of co-integration. Their study found out that, in long-run debt promote economic growth though FDIs negatively impact economic growth. Their findings were supported by Wamboye (2012). Juarez and Almada (2016) did a study on public debt, public investment and economic growth in Mexico. They used Dynamic models of panel data and generalized method of moments. Their study found out that public debt is positively correlated with public investments and that this will in turn improve on economic growth. These findings were contradicted by Amassoma and Ogbuagu (2014) who stated that the variables have got no relationship in the long-run. The research was advanced to address effect of public debt and FDI on financial development by Agyapong and Bedjabeng (2019) who found out that external debt and FDIs have a significant positive relationship with financial development in African economies. A qualitative focus of the same was done to seek influence of governance on FDIs in developing economies by Morrisey and Udomkerdmongkol (2012) who found out that total investment (private and FDIs) are high in countries with good governance though FDIs crowds out private investment.

Throughout literature, there is consisted evidence that public debt has an influence on FDIs levels. Given that economies have been adversely affected by Covid-19 pandemic, this has made majority of them to retort to increasing their debt levels as they aim to supplement their revenue sources. It is as a result of this that this study aimed at relating public debt and FDIs inflows at a time when Kenya's' FDIs levels were declining coupled with warnings from the world bank on the adverse borrowing by the country's government. This research sought to utilize public debt indicators utilized by the national treasury which are more relevant to Kenya and relating them with FDIs levels measured in US dollars.

Conceptual Framework

The conceptual framework diagrammatically explains the relation between the dependent and independent variables of a study. The dependent variable in our study is Foreign Direct Investment and the independent variables are; Gross financial liabilities, Interest Rate sensitivity, and public debt to GDP ratio and the debt budgetary revenue.

Fig 4



Source: Authors

REASEARCH METHODOLOGY

In this chapter, we discussed the study methodology and rationale behind the chosen methodology. We found the study variables and the econometric patterns we used to investigate our findings. We also examine the bases of data and the span of trend analysis. Furthermore, Our data analysis was discussed; including the tools of the econom trics employed and the test of statistics we employed to determine the power and statistical implications of the link among statistical variables.The study used the descriptive research design which involves description of all elements of the population study and help in identification of relationship between variables. The populace entailed all Foreign Direct Investors Inflows in Kenya during the period between the year 2010 and 2019. This study relied on archival data. The selected variables and length of the time series was a case study, Kenya. Thereafter, trend analysis was done between the year 2010 and 2019. The study relied on secondary sources of data like the data from World Bank, IMF, KNBS, Central Bank, National Treasury. Quarterly data of 10 years (Jan 2010 - Dec 2019) were collected and analyzed. Data analysis was done using Quantitative methods such as Descriptive Statistics of measurements which include Multiple regression analysis, central tendency measures including means, median, and standard deviation was vital in the analysis of the relationship between variables and inferential statistics which involves estimation of parameters and testing of statistical hypothesis. The analysis tool utilized was SPSS (21).

To examine the link between public debt and FDI inflows in Kenya, the study employed regression analysis using the model as shown below. This model is built on the argument of Gorg Udomkerdmongkol and Morrissey (2013) a study on the relationship between public debt and Foreign Direct Investment.

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

Whereby:

Y- FDI Inflows

X_1- Gross financial liabilities

X_2- Public debt to GDP ratio

X_3- Interest Rate

X_4- Debt budgetary revenue

β_0- minimum change in dependent variables when independent variables are held constant

β_1-β_4- rate of change

ε -Error term

In order to examine the statistical importance, we conducted Analysis of Variance (ANOVA) at 95% confidence level. And using the f values and p values the model significance was able to be interpreted.

DATA ANALYSIS, FINDINGS AND INTERPERETATION

This chapter entails the analysis then interpretation of the data collected. Our study was in the pursuit of determining the effects of Public Debt on Foreign Direct Investments in Kenya. Our analysis made use of descriptive statistics, correlation analysis and multiple linear regression analysis and presented the data in table form. Descriptive tools used in statistics give the minimum, maximum, mean and standard deviation of the variables used. We analyzed our data on annual basis for the period 2010-2019 using SPSS Software and the output obtained are presented in the tables below. The Foreign Direct Investment averaged 1047246372.40 with a standard deviation of 455477704.466 followed by Gross Financial Liabilities with mean of 35768712.343 and a standard deviation of 19750841.528, Public Debt to GDP Ratio with mean of 8.45327 and a standard deviation of 3.33316, Interest Rate with mean of 9.89005 and a standard deviation of 2.6088 and lastly Debt Budgetary Revenue with mean of 1900403.3020 and a standard deviation of 972329.7837.

	N	Minimum	Maximum	Mean	Std. Deviation
Gross Financial Liabilities	10	13744365.28	75354691.1	35768712.343	19750841.528
Public Debt to GDP Ratio	10	4.4275	14.9226	8.45327	3.33316
Interest Rate	10	6.357	16.5	9.89005	2.6088
Debt Budgetary Revenue	10	777017.39	3374280.79	1900403.3020	972329.7837
FDI	10	178064199	1625921131	1047246372.40	455477705.466

Table 1 Descriptive Statistics

Regression Analysis

Foreign Direct Investment Was Regressed against Public Debt to GDP Ratio Gross Financial Liabilities, Interest Rate and Debt Budgetary Revenue and the model summery was obtained as below.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.633[a]	.401	-.078	472889566.230

a. Predictors: (Constant), DBR, Interest Rate, Public Debt to GDP Ratio, GFL

Table 2 Regression Analysis

R-Squared value was 0.401 showing that 40.1% deviation in Foreign Direct Investment Inflows results from changes in Gross Financial Liabilities, Public Debt: GDP (Ratio), Interest Rate and Debt Budgetary Revenue. Other variables not included in the model constitute 59.9 per cent variation in FDI inflows.

Analysis of Variance

The significance value from our analysis: 0.556 is greater than P=0.05. The significance value entails the model is statistically insignificant in determining the degree of influence Gross Financial Liabilities, Interest Rate, Debt Budgetary revenue and Public Debt to GDP ratio has on FDI inflows in the economy. With a 5% significance level, the computed F value is 0.837 hence we can conclude that the general multiple regression model is statistically insignificant.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	74901675234161 6130.000	4	1872541880854 04032.000	.837	.556[b]
	Residual	11181227092475 40480.000	5	2236245418495 08096.000		
	Total	18671394615891 56610.000	9			

a. Dependent Vriable: FDI

b. Predictors(constant) DRB, Interest, Rates, Public Debt to GDP Ratio, GFL

Table 3: Analysis of Variance

Model coefficients

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3695931528.359	250169319 92.170		.148	.888
	Public Debt to GDP Ratio	95064083.698	264843863.564	.696	.359	.734
	Interest Rate	93677765.684	67193164.723	.537	1.394	.222
	GFL	-70560051.275	1706798943.861	-.085	-.041	.969
	DBR	-220543547.754	463294682.055	-.258	-.476	.654

Application of t-test was employed in determination of the significance level of each operational variable in our study. The significance column in the table above shows the relationship between the dependent and independent variables. At 95% confidence level, a p> 0.05 was used as a measure of significance and this statistically showed an insignificant relationship between dependent and independent variables meaning of all the variables analyzed in our study, none is a significant determinant of FDI inflows.

The regression equation below was estimated

$Y=3695931528.359-70560051.275X_1+ 95064083.698X_2 + 93677765.684X_3 - 220543547.754X_4$

Where:

Y- Foreign Direct Investment Inflows

X_1- Gross financial liabilities

X_2- Public debt to GDP ratio

X_3- Interest Rate

X_4 – Debt Budgetary Revenue

The above regression model indicates that if all the operational variables (Gross Financial Liabilities, Public Debt: GDP (Ratio), Interest Rate and Debt Budgetary Revenue) were equated to zero, the Foreign Direct Investment Inflows will be 3695931528.359. A single unitary increment in Gross Financial Liabilities will result to a 70560051.275 decrease in FDI, a unit increase in Public Debt: GDP (Ratio) results in a 95064083.698 increase in Foreign Direct Investment, a unit change in Interest Rate leads to a 93677765.684 increase in FDI while A unit change in Debt Budgetary Revenue results in a 220543547.754 decrease in Foreign Direct Investment.

CONCLUSION AND RECOMMENDATIONS

Introduction

In this chapter, research findings, conclusion and recommendations were summarized. Suggestions for future research and the limitations we encountered in the analysis are also given.

Summary

This study aimed at analyzing the effect of Public Debt on inflow of foreign direct investment in Kenya. Gross Financial Liabilities, Public Debt to GDP Ratio, Interest Rate and Debt Budgetary Revenue were the independent variables and the dependent variable was FDI. Descriptive research deign was used, secondary data obtained from CBK and analyzed using SPSS Software using yearly data for a period of 10 years from 2010-2019.

Public Debt to GDP Ratio and Interest Rate were found to have a positive correlation with Foreign Direct Investment in that increasing Public Debt to GDP Ratio and Interest Rate results to an increase in FDI while Gross Financial Liabilities and Debt Budgetary Revenue are negatively correlated to FDI in that increase in Gross Financial Liabilities and Debt Budgetary Revenue leads to a decrease in FDI inflows.

The R-Square value was 0.401 meaning that 40.1% change in inflow of FDI in Kenya can be determined by the four independent variables while 59.9% FDI inflows is correlated to other variables not covered in our study. FDI inflows would be 345362211.109 if our independent variables were equated to zero. A rise in Gross Financial Liabilities by one unit would result to a 220543547.75 reduction in FDI.

Conclusions

From our study, increase in Gross Financial Liabilities results to reduction in FDI and an increase in Debt Budgetary Revenue results to reduction in FDI. On the contrary, a rise in Public Debt to GDP Ratio causes an increase in FDI inflows and a rise in Interest Rate causes a rise in inflows of FDI in Kenya.

The independent variables influence FDI inflows in the country and account for 40.1% change in FDI and the variables not included in the model explain 59.9% change in FDI inflows in the country. Our F statistic value which is 0.837 means that our general model was found to be insignificant. The p value in the summary of ANOVA shows that these variables insignificantly affect inflows of FDI in Kenya.

Policy Recommendations

Due to the negative influence of Gross Financial Liabilities on FDI inflows in the country, we therefore recommend the government to develop and execute policies to regulate the Gross Financial Liabilities they borrow in order to encourage inflows of FDI.

From the study, Debt Budgetary Revenue negatively influence Foreign Direct Investment in flows in the country, we recommend the government to reduce deficit budgeting (expenditure exceeds revenue) which leads to excessive borrowing and this in turn discourages inflow of FDI.

Recommendations for further studies

This study recommends that primary data (questionnaires, interviews) sources because they give more accurate results to compliment this research to reduce reliance on secondary data. There are other independent variables affecting FDI inflows in Kenya, to incorporate other variables, further studies like exchange rates, economic growth, inflation rate and money supply is encouraged. By this policy maker will we able to control FDI inflows by determining which tools to use for future studies.

Since our study was limited to a period of 10 years, we recommend future scholars to use a longer period of time in their analysis say 20-30 years. This will be useful to disapprove study findings. And also further studies can be conducted for a bigger geographical region like EAC countries.

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APPENDICES

Appendix 1: Data on FDI Gross Financial Liabilities, Public Debt to GDP Ratio, Interest Rate and Debt Budgetary Revenue

YEAR	FDI(USD)	Gross Financial Liabilities	Public Debt to GDP ratio(Public Debt/GDP)	Interest Rate	Debt Budgetary(Expenditure-Revenue)
2010	178064199	13744365.28	4.4275	6.357	1016333
2011	1450460112	17675754.26	5.3660	9.594	984506.4267
2012	1380167160	19796741.81	5.7476	16.5	1685010.01
2013	1118819097	23332318.81	6.3980	8.833	1131078.2703
2014	820934459	27509050.39	7.1597	8.5	777017.39559
2015	619719962	34127168.47	8.4018	10.188	2351383.55708
2016	678803417	39017639.33	9.0724	10.667	2694781.56759
2017	1266137283	51727459.21	11.4762	10.00	3374280.7977
2018	1625921131	55401934.77	11.5609	9.333	3293172
2019	1332436904	75354691.10	14.9226	8.9286	1696470