Analyzing the Signaling Effect of Public Debt to Foreign Investment in Nigeria

Benson Emmanuel PhD[1]&Charles Ibebi PhD[2]
[1,2,]Department of Banking and Finance,
Federal University Otuoke, Bayelsa State
besonemmanuel2014@gmail.com, ibebicharles@gmail.com

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Abstract

This study examines the effects of public debt on foreign investment performance in Nigeria. This was aimed at ascertaining how DPD for domestic public debt, FDB for external public debt, and DS is for fiscal deficit have stimulate the foreign direct investment (FDI) performance in Nigeria for the period 2000 to 2021. Historical data was collated and estimated employing the ARDL-based Ordinary Least Squares (OLS) technique. The empirical results indicate that foreign direct investment responded to domestic debt and debt servicing negatively, but positively to foreign public debt in Nigeria. On the basis of the findings of this study, the following recommendations are made. The government should regularly review their domestic debt policy for reduction, policies that promote more foreign debt be adopted as against domestic debt and government should invest debt on income-generating ventures to reduce the burden of servicing.

1.0 INTRODUCTION

1.1 Background of the study

Historically, in Nigeria, like so many other developing countries, public expenditure has recorded a continuous increase over time, especially, as the government assumes an active role in the development of the economy by trying to put in place the infrastructure and institutional superstructure necessary for economic growth and development. Due to narrow tax base, increasing budgetary expenditures and falling crude oil price at the international oil market, the Nigerian economy has been confronted with declining growth of revenue for several decades; forcing the Nigerian government to rely on continuous borrowing both from internal and external sources to finance the budgetary deficit. The enormous debt stock and huge debt service payments for Nigeria distorts volumes of domestic investment, which has the tendency to boost economic growth and development as observed by Clement, Bhattarharya and Nguyen (2003).

Between 1980 to 2004, domestic and external debt with domestic private investment maintained inconsistent trend, butobviously noticed from the statistics that foreign investmentsuffered impediment from both domestic and external debt.This means that public debt portfolios crowds out foreigninvestment, that is, increase in public debt led to reduction ornon-existence of private

investments. However, within 2005and 2007, there was increase in domestic debt as well asprivate investment. The later situation is contrary tothe apriori expectation, but could be explained by the debtforgiveness received from Paris Club within the stated period.Also, foreign investment remained in decline overthe years, even when either domestic or external declined.This calls for further investigations on why such occurrences.

Nigeria, therefore, has witnessed rising public debt profilesince the advent of democracy in 1999, except for 2005 when she obtaineddebt forgiveness from the Paris Club Consortium in 2005. Forinstance, Nigeria's total government debt grew to N19.639 trillion as atJune 30, 2017, with a total domestic debt outstanding atN15.037 trillion making up the total public debt outstanding, (CBN, 2015); (DMO, 2017). In 2018, public debt keptincrease to the tune of N24.387, DMO (2018). This figure has risen from N39.56 trillion in 2021 to N41.6 trillion in 2022. The increasing trend wassignificantly sustained since the Buhari-led administration took over in 2015. However, this increasing debt profile puts desperate pressure on government to desperate tax measure to increase revenue. The question is, does this move not send a negative signal to foreign investor considering Nigeria as an investment destination? To this end, the studyinvestigated the relationship between public debt and foreign direct investment in Nigeria within the period of 2000and 2021.

1.2 Research objectives

The main objective of this study is to investigate therelationship between public debt and foreign investment in Nigeria. The specific objectives are to:

i. Determine the extent to which domestic debt affect foreign investment in Nigeria.
ii. Investigate if there is any significant impact of externaldebt on foreign investment in Nigeria.
iii. Ascertain the extent to which debt servicing significantly impact on foreign investment inNigeria.

1.3 Research hypotheses

H_{01}: domestic debt does not significantly impact on foreign investment inNigeria

H_{02}: external debt does not significantly impact on foreign investment inNigeria

H_{03}: debt servicing does not significantly impact on foreign investment inNigeria

2.0 LITERATURE REVIEW

2.1 Conceptual Review

Foreign Investment in Nigeria

Positive developments have occurred in Nigeria since May 29, 1999 when democracy replaced the spate of military governments. This has resulted in a number of spirited moves to attract investors - local and foreign - into the country. The President, Olusegun Obasanjo in a bid to achieve this

end embarked on a globetrotting mission that saw him interacting with other fellow Presidents and the business community of different countries. With a more relaxed taxing system, incentives and the creation of Nigerian Investment Promotion Commission (NIPC), the country was set to lure private sector finance. As a first step theGovernment took a bold move to privatise all the ailing public enterprises, Decree No. 25 of July 1996 backs this scheme. The Government set up the Bureau of Public Enterprise (BPE) to oversee this crucial venture and the National Council on Privatization (NCP) headed by the Vice-President to formulate pragmatic policies in this area.

One striking feature of FDI flows is that their share in total inflows is higher in riskier countries, with risk measured either by countries' credit ratings for sovereign (government) debt or by other indicators of country risk. There is also some evidence that its share is higher in countries where the quality of institutions is lower. Presently, Nigeria is enjoying reasonable level of foreign investment, but caution must be the watchword because the domestic investment undertaken by FDI establishments is heavily leveraged owing to borrowing in the domestic credit market. As a result, the fraction of domestic investment actually financed by foreign savings through FDI flows may not be as a large as it seems (because foreign investors can repatriate funds borrowed in the domestic market), and the size of the gains from FDI may be reduced by the domestic borrowing done by foreign-owned firms.

It is important that the Government concentrate on providing the basic infrastructures to support the local organised privatesector (OPS) that are ready to invest domestic funds into the economy. The response to private initiatives by the Government is quite commendable, but there is need for more favourable policies targeting specifically the locals as opposed to the foreigners. The recent creation of the Bank of Industry and the Small and Medium Industries Equity Investment Scheme (SMIEIS) is a pointer to better things to come in the future.

As part of the efforts to provide an enabling environment that is conducive to the growth and development of industries, inflow of foreign direct investment, shield existing investments from unfair competition, and stimulate the expansion of domestic production capacity; the federal government of Nigeria has developed a package of incentives for various sectors of the economy. These incentives, it is hoped, will help revive the economy, accelerate growth and development and reduce poverty.

Nigerian government accepts the private sector as the engine of growth and the creator of wealth, while the government's major responsibility is to provide the enabling environment for the private investors to operate. In this regard, laws which had hitherto, hindered private sector investments have been either amended or repealed and a national council on privatisation has been established to oversee orderlydivestment to private operators in vital areas of the economysuch as mining, transportation, electricity, telecommunications, petroleum and gas.

Nigerian government's policy of economic deregulation and liberalisation has opened up new windows of opportunity to all investors wishing to invest in the country's economy. In this connection, an interest rate regimeSupportive of the real sector of the economy as well as an exchange rate that is market determined are the object of government policy. The security of life and property of the citizens are being vigorously pursued with the reorganisation and strengthening of the Nigerian Police Force.

In addition, the Nigerian Investment Promotion Council (NIPC) had been strengthened to enable it serve as a one-stop office for clearing all the requirements for investment in the country. The tariff structure is being reformed with a view to boosting local production.Government has introduced a new visa policy to enable genuine foreign investors to procure entry visa to Nigeria within 48 hours of submission of required documentation.Existing "expatriate quota" requirement for foreign nationals working in Nigeria is in the process of being replaced with"work permit" which will be administered by the Nigerian Investment Promotion Council (NIPC).

Public Debt in Nigeria

An escalating debt profile imposes a critical bottleneck on the path to economicgrowth and development of nations. This is because it costs more to service debtand the costs may grow beyond the capacity of the debtor nation which willthereby have a negative impact on the ability of the borrowing nation to achievethe desired monetary and fiscal goals. Furthermore, government borrowing cancrowd-out private investment and reduce future output and wages which obviously threatens the welfare of residents by reducing their standard of living.

Sanni (2007) observed that Nigeria's fiscal operations over the years have resultedin varying degrees of deficit; the financing of which has had tremendousimplications for the economy. The large fiscal deficits experienced in Nigeria overtime have had adverse effects on the economy because it reduced nationalsavings, which in turn increased domestic interest rates, thereby hindering capitalformation and crowds out private sector investment (Anyanwu, 1998). The reduction in investment in turn affected employment as firms or businessesreduced their demand for labour and other factor inputs. All these reducednational outputs, which in turn led to trade deficits and balance of paymentsproblem, and a reduction in the overall well-being of the people. In this kind ofsituation whereby the economy is faced with both a fiscal deficit and a trade deficit simultaneously, we have what is usually referred to as the *'the twin deficitsphenomenon'.*

In recent times, the Nigerian economy has been having persistent fiscal deficit,adverse balance of payment problems and incessant fall in the price of crude oil(Nigeria's major export product) in the international market which led to arecession in the economy in 2016. However, to boost the economy, thegovernment is left with no choice than to engage in borrowing (internal and external). The adverse effects of public debt, investment and economic growth-related problems on the Nigerian economy are becoming unbearable as it isbecoming increasing difficult for the government to pay salaries of civil servant letalone execute developmental project. Unfortunately, despite the huge publicdebt the country owes, there is a high level of embezzlement andmisappropriation of funds among public office holders in Nigeria such that themoney intended for the general good is siphoned by an (some) individual(s), thusmaking public debt ineffective as it is unable to achieve the purpose for which itwas borrowed in the first instance.

In addition, fiscal deficits have been financed through internal and externalborrowing over time. The internal borrowing affects the interest rate as it crowdsout the private investment in the long run. While fiscal imbalance can influencecurrent account balance and vice versa, the volume of public debts (externaldebt especially), which is one of the panaceas for fiscal deficit, could affect thecurrent account position. Hence, there is a link between fiscal balance andcurrent account balance. However, the major causes of huge public debt inNigeria are not far-fetched. The situation

is such that, the national output (GDP) isrelatively low primarily due to overdependence on imports; unemployment rate ison the increase; per capita income is relatively low; exchange rate is highlyvolatile; and interest rate is fixed at double-digit, among others unpleasant economic situations. Unfortunately, the cost of debt servicing is also persistentlyincreasing thus, making debt repayment take longer time than expected. Allthese discourage borrowing and therefore hinder and retard investment.

Role of Public Debt in Foreign Investment

The goal of every economy is to achieve the macroeconomic goals of pricestability, full employment, favourable balance of payments position, and high andsustainable economic growth, among others (Apere, 2014).In asituation where a government has fiscal deficit, it finances it by either borrowing(internal or external) to supplement domestic savings, printing more money or drawing down on foreign reserves account. Many developing economies resort toborrowing (public debt) to finance their fiscal deficit because of the need tobridge the gap between their savings and investments and the resources tofinance the optimal level of economic growth and development are in shortsupply.

Traditional and modern economic theories state that incurring reasonable publicdebts (both domestic and external) will most likely enhance economic activitiesand hence, economic growth. However, the direction of government spendingwill determine, to a large extent, if public debt will lead to economic growth ornot. For instance, borrowing to service debts, for current consumption or forrecurrent expenditure may not stimulate the economy while borrowing to carryout development projects, increase capital expenditure and rational investment inproductive ventures will, in the long run, lead to economic growth. Unfortunately,many developing countries borrow for the former reason, which is why their debtprofile keeps increasing, investment keeps falling, unemployment rises, nationaloutput falls and majority of the residents are trapped in poverty. The failure of debtoverhang model to explicitly analyse how public debt influences growth does notlimit the fact that a high debt profile retards growth partly by lowering investmentand increasing poverty (Egbetunde, 2012).

Economic theory also argues that reasonable levels of public debt could stimulateeconomic growth in developing economies (Pereira & Xu, 2000). Thus, debt initself is not bad, but lack of optimal utilization of the debt is. Nigeria's domesticdebt outstanding comprises debt instruments such as treasury bills, federalgovernment bonds, promissory notes, treasury certificates, promissory note,treasury bonds and development stocks, among others and are sourced from theCentral Bank of Nigeria (CBN), commercial banks, merchant banks, sinking fund,the total banking system and non-bank public, among others. On the other hand,external debts are sourced from Paris Club, London Club, promissory notes, andmultilateral organizations like the World Bank and IMF, among other foreigncreditors. However, in 2006, Nigeria stopped borrowing from Paris Club andLondon Club, and in 2007, promissory notes stopped being a source of debt toNigeria (CBN, 2016).

2.2 Theoretical Review

The Dual Gap Theory

The dual gap theory postulated by Chenery and Strout (1966) which is an extension of the Harrod-Domar model can be used to explain the theoretical relevance of foreign finance such as public debt (foreign and domestic) and FDI to growth in LDCs. The theory identifies two gaps namely the savings gap and the foreign exchange gap. The savings gap arises because the level of savings in LDCs is quite low as a result of low-income levels, and it is not sufficient to finance the needed investment required for economic growth. To bridge the gap, there is a need to attract foreign finance in the form of domestic debt, FDI, etc. to complement domestic savings. This will accelerate the rate of economic growth in the LDCs all things being equal. The foreign exchange gap arises as a result of the shortage of foreign exchange which results from low export earnings. To bridge this gap, the inflow of foreign aid is required (Akande &Oluyomi, 2010).

However, in deciding whether to borrow externally to finance economic growth and development, a country should put into consideration whether or not the returns on the borrowed funds will be higher than the cost. The import of this is that a country should invest in projects having expected returns higher than the cost of the foreign debt, otherwise there would be problem of default in debt service payments which engenders accumulation of debt and raises the debt burden, making it unsustainable and ultimately impeding the long term growth prospect of the country.

Early development economists and proponents of external debt including Singer (1949), Avramovic (1966), and a host of others argued external capital including external debt can stimulate economic growth, especially in developing countries. Their position was that the transfer of foreign resources to less developed countries (LDCs) which are characterized by the low level of savings and investment as a result of low-income levels will help position them in the sustainable growth path. This implies that the inflow of foreign resources from advanced countries to developing countries is necessary to bridge the savings gap and serves to complement domestic resources with expectant positive effects on growth.

2.3 Empirical Review

Salyungu and Felician (2019) explored theeffect of public debt on private investment in Tanzania usingsecondary data for the period of 1970-2016 andAutoregressive Distributed Lag (ARDL) bound test tocointegration. Their results suggested combined effect ofdomestic and external debt on private investment which isstatistically significant both in long run and short run. Thispaper filled the gap in scope of study to update the currentliterature up to 2018.

Onyinyechi (2019) considered the consequences of externalloan on capital investment in Nigeria (1996 - 2018),employing data from the World Bank and Central Bank ofNigeria Statistical Bulletin, 2018 with variables as,government capital expenditure, external debt accumulation, debt servicing cost, inflation rate, and exchange rate. Theauthor used the ordinary least squares multiple regressionmethod. The regression results indicated that external debt hasa significant negative impact on capital investment while debtservicing cost has a strong and significant positive

effect oncapital investment. The author generally consideredconsequences of external debt on capital investment, but thisresearch streamlined the aspect of investment that suffers asexternal debt is incurred and inefficiently used.

Azeez, Oladapo and Aluko (2015) evaluate the impact ofexternal debt and foreign direct investment on the growth ofNigeria through an error correction modeling approach. Theyfound that external debt is inversely and insignificantly relatedto economic growth while foreign direct investment is alsoinversely and significantly related.

Also, Awan, Ahmad, Shahid and Hassan (2014) evaluate the factors that influenceFDI inflow in Pakistan from 1988 to 2012; they found thatnational income, domestic investment (gross capital formation) and exports have positive and significant influenceon foreign direct investment (FDI) in the country whileexternal debt and imports are negative factor.

Apere (2014) used time-series data sourced from CBN Statistical Bulletin to examine the impact of public debt on private investment in Nigeria for the period 1981 to 2012. He adopted the instrumental variable technique of estimation and bootstrapping technique for the computation of normal based standard errors for the turning points to regress private investment as a ratio of GDP on domestic debt, domestic debt squared, external debt, external debt squared, and private consumption expenditure as a percentage of GDP. The results revealed a linear and positive relationship between domestic debt and private investment; a U-shaped impact of external debt on private investment; and an inverse relationship between private consumption expenditure and private investment.

Ekpo (2016), in his study, examined the determinants of private investment in Nigeria. The finding of the study showed that the determinants of private investment in Nigeria are interest rate, public investment rate, domestic inflation rate, fiscal deficits, size and growth rate of market, poor provision of infrastructure, political and economic stability, availability and access to bank credit, institutional factors and investment climate.

Erhieyovwe and Onovwoakpoma (2013) used time-series data sourced from Nigeria Bureau of Statistics to examine the impact of external debt burden on major macroeconomic variables in Nigeria. The result of the cointegration test carried out in the study revealed that long run relationship exists among external debt, export, inflation, foreign direct investment and real GDP. The result of the estimation showed that external debt burden, foreign direct investment, inflation and export have a positive relationship with economic growth.

Asogwa and Okeke (2013) examined the crowding out effect of budget deficits on private investments in Nigeria's economy. The result showed that budget deficits crowds out private investments and that private investments granger cause budget deficit with feedback. Based the findings, the study recommended that stakeholders reduce recurrent expenditure and increase its capital expenditure in order to encourage and make conducive environment for private investment to thrive which will ensure economic growth.

Using Johansen cointegration technique and Vector Error Correction Model (VECM), Akomolafe, Bosede, Emmanuel and Mark (2015) in their study aimed at investigating the effect public borrowing has on private investment in Nigeria using time-series data from 1980 to 2010 to

examine this relationship. The study disaggregated public debt into domestic and external debt. The empirical results revealed that domestic debt crowds-out domestic investment both in the short run and long run while external debt crowds-in domestic investment in the long run.

Paiko (2012) examined the impact of deficit financing on the performance of private investment in Nigeria. Estimating time-series secondary data sourced from CBN statistical bulletin and National Bureau of Statistics bulletin, it was found that an inverse relationship exists between deficit financing and private investment and that the former crowds-out the latter.

3.0 METHODOLOGY

3.1 Research Design

This study makes use of the ex-post-facto research design which is aimed at establishing the impact of one variable and another. This study will use descriptive and regression analysis. According to Emaikwu (2010), descriptive and regression research are targeted at determining the direction and magnitude of relationship among two or more variables so in this case, ex-post facto research design will be used to determine the effect of public debt on foreign direct investment in Nigeria from 2000 to 2021.

3.2 Nature and Sources of Data

Annual time series data spanning the period from 2000 to 2020 were employed in the study. The data were sourced from the CBN Statistical Bulletin (2021) and the World Bank's World Development Indicators (2021). Specifically, data on net foreign direct investment (FDI), domestic public debt (DPD), external public debt (FPD), and debt servicing (DS) were obtained.

3.3 Analytical Framework and Model Specification

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

$$FDI = f(public\ debt)$$

But public debt here is decomposed into: domestic public debt (DPDB), external public debt (EXPDB), and fiscal deficit (FDEF).

So,

$$FDI = f(DPDB, EXPDB, FDEF)$$

The above becomes the operational model for this study.

3.4 Method of Data Analysis

The model framework for this study is based on debtoverhang theory and credit crowding hypothesis as the majortheoretical channels through which external and domestic debt

relate to investment and economic growth. Also, this studyemploys a multivariate regression model based on ordinary least squares (OLS) system of equation in estimating the response of foreign direct investment to public debt in Nigeria. Following the analytical model specification above, OLS equation is specified thus:

$$FDI = \beta_0 + \beta_1 DPD + \beta_2 FPD + \beta_3 DS + e_t$$

Where,

FDI = net foreign direct investment

DPD = domestic public debt

FDB = external public debt

DS = fiscal deficit

β_0 = intercept of the model

$\beta_1 - \beta_3$= coefficients of the model

e_0 = error term

3.5 Decision Criteria

The following decision rules were adopted for rejecting or not rejecting the null hypotheses:

If,

i. Probability value (p-value) > 0.05 critical value; **do not reject the null hypothesis (H_{0i})**. Meaning that there is no sufficient statistically significant evidence to reject the null hypothesis at the 5% level of significance.

ii. Probability value (p-value) < 0.05 critical value; **reject the null hypothesis (H_{0i})**. Meaning that there is sufficient statistically significant evidence not to reject the null hypothesis at the 5% level of significance.

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Descriptive Statistics

The study conducted the descriptive statistics of the relevant variables involved. Table 4.1 vividly shows these statistics. It shows total number of observations, mean, median, maximum, minimum, standard deviation and the sum of mean deviation. This study's dependent variable is net foreign direct investment (FDI), while the independent variables are DPD for domestic public debt, FDB for external public debt, and DS is for fiscal deficit. However, FDIhas a minimum of 0.1952% and a maximum value of 5.7908% of Nigeria's GDP. In another consideration, the mean values of DPD, FPD and DS are 11.39%, 19.27% and 1.81%, respectively.

Table 4.1: Descriptive Statistics

	FDI	DPD	FPD	DS
Mean	1.6266	11.3937	19.2682	1.8138
Median	1.5012	10.2081	10.3965	1.5693
Maximum	5.7908	23.0430	60.3696	6.4495
Minimum	0.1952	5.7720	1.2436	0.5626
Std. Dev.	1.2061	4.5276	20.0836	1.2970
Skewness	1.8260	1.1541	0.8096	2.0346
Kurtosis	6.7369	3.5466	2.2070	7.1496
Jarque-Bera	36.4017	7.5019	4.3340	45.0363
Probability	0.0000	0.0235	0.1145	0.0000
Sum	52.0508	364.5987	616.5822	58.0419
Sum Sq. Dev.	45.0929	635.4626	12503.8400	52.1483
Observations	32	32	32	32

Source: Researcher

For the degree of volatility, the standard deviation in table 4.1 showed that FPD in Nigeria was more volatile having a standard deviation value of 20.0836. This is clearly so because the standard deviation value is the highest among all the data included in the model.

4.2 Model Estimation

The estimated lagged ARDL model from the coefficients is stated below:

FDI = 4.09 + 0.49FDI (-1) – 0.33DPD + 0.07FPD - 0.12DS

From the model estimation above, domestic public debt and debt servicing had negative influence on FDI, while the lagged value of FDI and foreign public debt had positive relationship with FDI. However, the contribution of FPD to FDI is seen to be the highest with a coefficient value of 0.07.

4.3 Hypotheses Testing

To test the hypotheses, we will use probability criteria, if:

$p > 0.05$: Accept H_O.

$p < 0.05$: Reject H_O.

Testing of Hypothesis One (1)

Hypothesis one is restated below:

H_{01}: domestic debt does not significantly impact on foreign investment in Nigeria

Table 4.2: Extraction for Testing Hypotheses One

Variable	Coefficient	t-Statistic	Prob.	Decision
DPD	-0.3388	-6.6826	0.0000	Reject H01

Source: Researcher

First of all, the result shows that there is a negative and significant relationship between DPD and FDI (representative of the net of foreign direct investment) in Nigeria. The result means that a single unit increase in DPD leads to a decrease of 0.3388 units in foreign direct investment in Nigeria. Since the computed probability value of DPD (0.0000) is less than the critical test level of 0.05 (i.e. $P < 0.05$), we reject the null hypothesis and conclude that domestic public debt has significant negative impact on foreign direct investment in Nigeria.

Testing of Hypothesis two (2)

Hypothesis two is restated below:

H_{02}: external debt does not significantly impact on foreign investment in Nigeria

Table 4.3: Extraction for Testing Hypotheses Two

Variable	Coefficient	t-Statistic	Prob.	Decision
FPD	0.0771	8.3856	0.0000	Reject H02

Source: Researcher

The result in table 4.4 as issued in regression revealed that there is a positive and significant relationship between FPD and FDI (representative of the net of foreign direct investment) in Nigeria. The result means that a single unit increase in FPD leads to an increase of 0.0771 units in foreign direct investment in Nigeria. Since the computed probability value of FPD (0.0000) is less than the critical test level of 0.05 (i.e. $P < 0.05$), we reject the null hypothesis and conclude that foreign public debt has significant positive impact on foreign direct investment in Nigeria.

Testing of Hypothesis three (3)

Hypothesis three is restated below:

H_{03}: debt servicing does not significantly impact on foreign investment in Nigeria

Table 4.4: Extraction for Testing Hypotheses Three

Variable	Coefficient	t-Statistic	Prob.	Decision
DS	-0.1201	-0.6473	0.5242	Accept H03

Source: Researcher

Thirdly, the result in table 4.5 as issued in regression revealed that there that there is a negative and insignificant relationship between DS and FDI (representative of the net of foreign direct investment) in Nigeria. The result means that a single unit increase in DS leads to a decrease of 0.1201 units in foreign direct investment in Nigeria. Since the computed probability value of DS (0.5242) is greater than the critical test level of 0.05 (i.e. $P < 0.05$), we accept the null hypothesis and conclude that debt servicing has insignificant negative impact on foreign direct investment in Nigeria.

4.4 Discussion of Results

Effect of domestic public debt on foreign private investmentin Nigeria

From the empirical result, there was a negative and significant relationship between DPD and FDI (representative of the net of foreign direct investment) in Nigeria. As the computed probability value of DPD (0.0000) is less than the critical test level of 0.05 (i.e. $P < 0.05$), we reject the null hypothesis and conclude that domestic public debt has significant negative impact on foreign direct investment in Nigeria.This implies that an increase in domestic debt is detrimental to foreign investment in Nigeria. The findings compare favourably with similar studies by Nwaeze (2017) and Ncanywa and Masoga (2018) that also suggests that domestic debt and total debt impedes foreign investments in Nigeria. This means that the Nigerian government has been diverting borrowed funds. The findings suggest that as the government continues to borrow domestically, it could cause diminishing effect to private investments. When domestic lenders are major creditor to thegovernment and if the government continues to incur large borrowing domestically, it could belikely to crowd-out the private sector.

Effect of external public debt on foreign private investmentin Nigeria

From the empirical result, there is a positive and significant relationship between FPD and FDI (representative of the net of foreign direct investment) in Nigeria. As the computed probability value of FPD (0.0000) is less than the critical test level of 0.05 (i.e. $P < 0.05$), we reject the null hypothesis and conclude that foreign public debt has significant positive impact on foreign direct investment in Nigeria.This agrees with Ebhotemhen (2020) on the grounds that debt-Export ratio confirms its expansionary effect on investment, Agyapong and Bedjabeng (2020)'s findings that external debt, alongside foreign direct investment (FDI), have a significant positive relationship. It can be inferred that the strict details of adherence to repaying foreign debt where government's manipulative influence is less could very well explain this. The government do not have many options other than to honour the terms of usage and repayment contained in foreign

debts.Fromthese findings, the optimal model for estimating the relationship between public debt (domestic and foreign) and private investment in Nigeria should include asymmetric specification in the short run and in the long run.

Effect of debt servicing on foreign private investmentin Nigeria

From the empirical result, there is a negative and insignificant relationship between DS and FDI (representative of the net of foreign direct investment) in Nigeria. As the computed probability value of DS (0.5242) is greater than the critical test level of 0.05 (i.e. $P < 0.05$), we accept the null hypothesis and conclude that debt servicing has insignificant negative impact on foreign direct investment in Nigeria.

5.0 CONCLUSION AND RECOMMENDATION

Conclusion

This study examines the effects of public debt on foreign investment performance in Nigeria. This was aimed at ascertaining how DPD for domestic public debt, FDB for external public debt, and DS is for fiscal deficit have stimulate the foreign direct investment (FDI) performance in Nigeria for the period 2000 to 2021. Historical data was collated and estimated employing the ARDL-based Ordinary Least Squares (OLS) technique. The empirical results indicate that foreign direct investment responded to domestic debt and debt servicing negatively, but positively to foreign public debt in Nigeria.

Recommendations

On the basis of the findings of this study, the following recommendations are made.

a) The government should regularly review their domestic debt policy for reduction.
b) Policies that promote more foreign debt be adopted as against domestic debt.
c) Government should invest debt on income-generating ventures to reduce the burden of servicing.

References

Abbas, A. & Christensen, J. (2007). The Role of Domestic Debt Markets in Economic

Akande, E. &Oluyomi, O. (2010). *The Two-Gap Model of Economic Growth in Nigeria: Vector Autoregression (VAR) Approach*. Paper presented at the 13th Annual Conference on Global Economic Analysis, Penang, Malaysia.

Akomolafe, K.J., Bosede, O., Emmanuel, O. and Mark, A. (2015). Public Debt and Private Investment in Nigeria. American Journal of Economics, 2015, 5(5): 501-507.

Asogwa, S.O. and Okeke I.C. (2013). The Crowding Out Effect of Budget Deficits on Private Investment in Nigeria. European Journal of Business and Management, Vol.5, No.20.

Avramovic, D. (1966). Economic Growth and External Debt. *Canadian Journal of Economics and Political Science*, *32*(1), 115-117.

Egbetunde, T. (2012). Public Debt and Economic Growth in Nigeria: Evidence from Granger Causality. *American Journal of Economics*, *2*(6), 101-106.

Ekpo, U.N. (2016). Determinants of Private Investment in Nigeria: An Empirical Exploration. Journal of Economics and Sustainable Development, Vol.7, No.11, 2016.

Erhieyovwe K.E. &Onovwoakpoma O.D. (2013). External Debt Burden and its Impact on Growth: An Assessment of Major Macro- Economic Variables in Nigeria. Academic Journal of Interdisciplinary Studies, Vol. 2, No. 2.

Ezeabasili, V.N. &Nwakoby, C.I.N. (2013). Fiscal Deficits and Private Investment: Econometric Evidence from Nigeria. International journal of Innovative Research in Management, Issue 2, Volume 3.

Global Finance (2017). Countries With The Most External Debt in 2017. Retrieved from https://www.gfmag.com/global-data/economic-data/xtegh9-external-debt-in-countries-around-the-world on September 16, 2022

Imimole B &Imoughele L. (2010). Determinants and Sustainability of External Debt in a Deregulated Economy: A Co-integration Analysis from Nigeria (1986-2010). *American International Journal of Contemporary Research 4 (6)*,28-36

Kalugalla, K. M. I. P., Jayasundara, J. M. D. P., &Chandrarathne, S. G. U. S. (2020). The impact of budget deficit on private investment in Sri Lanka. *Journal of Management Matters*, *7*(1), 73 -86.

Okoro, A. S. (2016). Public Debt, *CBN Understanding Monetary Policy Series No. 36*.

Ostadi, H. &Ashja, S. (2014). The relationship between external debt and foreign direct investment in D8 member countries (1995-2011), *unpublished thesis*, Islamic Azad University, Isfahan, Iran

Paiko, I.I. (2012). Deficit Financing and Its Implication on Private Sector Investment: The Nigerian Experience. Arabian Journal of Business and Management Review (OMAN Chapter), Vol. 1, No.10; May 2012.

Ribeiro, H. N. R., Vaicekauskas, T. &Lakstutiene, A. (2012). The effect of public debt and other determinants on the economic growth of selected European countries, *Economics and Management*, 17 (3), 914-921

Ricciuti, R. (2001). Assessing Ricardian Equivalence. *Societaitaliana di economia publica Working Papers*, March.

Sharifi, H. &Mirfatah, J. (2012). The Impact of Exchange Rate Volatility on Foreign Direct Investment in Iran: *Department of Economics, Khorasgan Branch, Islamic Azad University, Isfahan, Iran*

Udomkerdmongkol, M., Gorg, H. & Morrissey O. (2013). Foreign direct investment and exchange rates: a case study of U.S. FDI in emerging market countries. *Unpublished MBA Thesis*, Sunderland University

Wamboye, E. (2012). *External debt, trade and FDI on economic growth of least developed*, Unpublished PhD Thesis, Pennsylvania State University