Impact Of Public Debts' Component On Crowding Out Effect Of Private Domestic Investment In Nigeria

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Abstract

The study interrogated the rationale behind the federal government's continued reliance on Keynesian fiscal policy prescriptions of deficit financing as a way of spurring sustainable economic growth in a developing economy like Nigeria; especially when such ideology seemed to contrast sharply with the realities of dwindling growth indices. Thus, this study examined the influence of public debts on the crowding-out effect of private domestic investment in Nigeria from 1986 to 2021. The research used the autoregressive distributed lag (ARDL) model in the analysis. Data obtained from the Central Bank of Nigeria statistical bulletin, volume 32, 2021 on external debt, external debt service, domestic debt, domestic debt service, interest rate, and exchange rate were estimated in the study. The results indicated that external debt and external debt servicing had significant negative effects on private domestic investment; while domestic debt exerted an insignificant positive influence on domestic investment. The result implies that servicing of external debt crowds out private domestic investment in Nigeria. Hence, the government should curtail future contraction of external debt, as any further external debt contraction would lead Nigeria into debt overhang, where future borrowing would almost be impossible for the country.

Keywords: Crowding, Debt, Domestic, External, Investment, Private

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I. INTRODUCTION

In absolute term, Nigeria's public debts, especially the external debt is the largest among the sub-Saharan African countries and has over time been rescheduled severally (Ali & James, 2018). Despite this refinancing by the creditors who are either members of the London Club, Paris Club or even independent creditors, Nigeria hardly meets up with the debt obligations. Consequently, the arrears of this debt have inexorably accumulated. It is against this notion that the nation found itself in a foreign financial enclave. This no doubt, strains the diplomatic relations of the country with its international partners, especially among the members of the European Union such as France, Germany and Great Britain who are the nation's major creditors (Ali & James, 2018). Public debts are categorized into external debt and domestic debt.

Over time, the level of external debt in Nigeria has been on the increase. In theory, nations borrow to execute infrastructural projects and improve economic growth and the living standard of people. According to Anyanwu and Erhijiakpor (2004), external debt acts as a tool for managing an economy, and filling savings-investment gaps, especially in the face of fluctuating prices of export commodities and dwindling foreign exchange earnings. Igbodika, Jessie and Andabai (2016) opined that external debt if properly managed would reduce macroeconomic risks. Though external borrowing is very essential for infrastructural development, if excessively accumulated could negatively affect an economy by crowding out private domestic investment.

Nigeria's external debt dated back to 1958 when the nation contracted her first loan from the World Bank to the tune of US \$28 million for railway construction. Since then, the external debt has been fully rapid. It was renamed relatively low at the event of the oil boom in the 1970s. During the period, the nation's foreign exchange position was very healthy and Nigeria had to lend money to such institutions as the International Monetary Fund (IMF) under the oil facility in 1974 (Kehinde, Olanike, Oni & Achukwu, 2015). So, within the oil boom era, it was a general perception that Nigeria was relatively under-borrowed.

But this impressive situation changed dramatically in 1977 when the oil boom collapsed with the emergence of the oil glut. The reserve out of fortune brought a lot of pressure on the public finances and consequently, became necessary to borrow to support the balance of payments. To this end, Nigeria obtained its

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first jumbo loan worth \$1 billion from the International Capital Market in 1978. The loan had a short-term maturity with a very high-interest rate (Karagol, 2002). From then, the nation's external borrowing rose sharply and stood at \$70.57 billion in 2020 and the naira equivalent; stood at \$39.556 trillion in 2021. Most of the loans were raised from private capital markets as funds from the bilateral and multilateral institutions were difficult to source. To further complicate these situations, some state governments started borrowing from external sources to finance all sorts of projects, regardless of their viability. Most of the loans sourced were used to finance social white elephant projects which are unproductive (Kehinde, Olanike, Oni & Achukwu, 2015).

It should be noted here that whereas the debt secured between 1970 and 1978, comprised mostly of soft long-term loans from bilateral and multilateral institutions, the borrowing after 1978 was obtained from private capital markets with very high rates of interest. The drastic decline in oil income resulting from the oil glut, alongside high-profile corruption among political officials, led to the country's inability to meet up with its external loan obligations (Karagol, 2002).

The external debt crisis of Nigeria began with the changing structure of the nation's debt. While the share of official development assistance and concessional loans declined over time, the debt share owed to private creditors and loans contracted on market terms increased. The shift from official to private sources of credit by Nigeria shortened loan maturity. An important consequence of the maturity transformation was debt service obligations at a time of acute shortage of foreign exchange. This explained the rapid buildup of payment arrears and thus, worsened the age-long problem of net capital flows. The consequence has been a serve bunching of amortization and interest payments and a worsening of the debt crisis, and as such, it has formed the bulk of outstanding external debts.

To service this huge external debt, domestic borrowing became imperative; a situation that negatively affected loanable funds available for private domestic investment in the economy. For instance, in 1990, private domestic investment, external debt, domestic debt, external debt service and domestic debt service growth rates stood at 24.6%, 24.2%, 87.9%, 78.6% and 44.3%, respectively. By 2000, external debt decreased to 20.2% and debt service to external debt rose to 110.3%, domestic debt and its debt service declined to 13.01% and 36.35% respectively, while private domestic investment increased to 38.7%. In 2010, external debt further declined to 16.83% and its debt service recorded a negative growth rate of 27.9%, but domestic debt rose to 41.01% as debt service to domestic debt fell to 25.8% whereas private domestic investment again declined to 4.09%. Similarly, in 2020, external debt, its debt service, and domestic debt increased to 40.8%, 39.3 and 35.2%, respectively with domestic debt service increased to 24.8% and 59.2% respectively, domestic debt also rose to 20.1% but its debt service fell to 20.8% whereas private domestic investment declined to 16.6% (CBN, 2021).

These trend analyses further confirmed contradictions in the relationship between public debts and their debt services in Nigeria. Consequently, productivity, economic growth, exports, the standard of living of people, income, and aggregate demand have remained very low alongside high rates of unemployment, inflation, poverty level, and balance of payments deficits characterizing the economy. It is against this backdrop that this study is motivated to explore the impact of the public debt component on crowding out of private domestic investment in Nigeria.

Theoretical Framework

II. LITERATURE REVIEW

The theories in which this study is anchored include the debt cycle theory and the debt overhang. These theories provide a sufficient explanation of the relationship between the public debt component and private domestic investment in an economy.

The debt cycle theory

The theory of the debt cycle was postulated by Avramovic in 1964 based on the neoclassical approach to optimal debt (Avramovic, 1964). The theory differentiates three stages in a debt cycle. First, it observed that domestic savings are insufficient for financing needs. External debt assists partially in financing investments and paying interest. Secondly, domestic savings increase and support a significant part of investments, but remain insufficient. Thirdly, debt begins to decline and domestic savings exceed investment. Thus, the length of a cycle varies according to the assumptions made about the target growth rate, interest rate, savings rate, investment rate and average loan duration. The theory conceived that starting from zero debt, the debt cycle can last 36 years, of which 26 years for the growth phase and 10 years for the decline phase.

The debt overhangs theory

The debt overhang theory was propounded by Howard in 1972. Debt overhangs surface when a nation's debt exceeds its ability to repay the debt. The debt overhang theory suggests that if a country is exceedingly indebted to the extent that the repayment capacity of the debt becomes difficult, debt service will crowd out

private investments and distorts economic growth (Gordon & Cosimo, 2018). Thus, debt overhang occurs when the debt burden of a country is so large that it becomes hard to secure further borrowing to finance new projects. In this view, Coccia (2017) opined that debt overhang deals with a situation in which public debt and public debt servicing impact the economic growth of a nation by making debt repayment a priority rather than other expenditures. Excessive public borrowing has a dual effect on the domestic economy. First, the crowding out effect, and second, a hike in interest rate effect. High-interest payment obligations can raise a country's budget shortfall. Similarly, huge debt services will hamper growth by reducing public resources and productive spending to stimulate investment and economic growth.

Empirical Review

Arsene, Luc and Desire (2020) investigated the effect of external debt on domestic investment in sub-Saharan Africa from 1980 to 2017. The study focuses on four zones including EAC, ECOWAS, CEMAC and SADC. The method of analysis utilized in the study was the Generalized Method of Moments (GMM). The study revealed that external debt had a positive effect on domestic investment in SADC and EAC, with a bearable debt threshold, which accounts for 74.33% of the gross domestic product in the EAC zone. For CEMAC and ECOWAS, the effect of external debt on domestic investment is rather negative, but for a debt threshold below 94.73% of GDP in CEMAC, the effect on investment is positive.

Uma, Eboh and Obidike (2013) examined the influence of total domestic debt, total external debt cum servicing of external debt from 1970-2010 on the economic development of Nigeria. The study utilized the Johansen test for co-integration and ordinary least squares in analyzing the data. The results showed that total domestic and total external debts are inversely and insignificantly related to real gross domestic product. Interest on total external debt relates positively to real gross domestic product contrary to our expectations but at an insignificant level.

Erdal (2012) investigated the long-run effects of external debt service on the gross national product level. Moreover, the information on cointegration in variables was taken into consideration in specifying the model. The study applied the methodology to Turkey and the results showed that external debt service had a negative short-run impact on economic growth. The results also indicated a unidirectional causal relationship between debt service and investment level.

Dinci and Olajide (2021) empirically evaluated the relationship between domestic debt and private investment in Nigeria from 2000: Q1 - 2019: Q2 using the Autoregressive Distributed Lag (ARDL) model. The time series data were found to exhibit mixed order of integration, thereby necessitating the choice of the Autoregressive Distributed Lag (ARDL) model. The model was tested for cointegration and the results of the Bounds test showed evidence of a long-run equilibrium relationship among the variables. From the long-run equation, domestic debt, real GDP and the prime lending rate were significant and positive effects on private domestic investment. The study affirms that domestic debt has a significant and negative effect on private investment in Nigeria, confirming the crowding-out hypothesis.

Gap in Literature

To examine the effect of the component of public debts on crowding out private domestic investment, researchers often concentrated on debt service to external debt, private domestic investment, gross domestic product, and prime lending rate. However, this work differs from other reviewed studies by modifying the existing model to involve private domestic investment, external debt, external debt service, domestic debt, domestic debt service, interest rate and exchange rate. Thus, the study added external debt, domestic debt and its debt service, and exchange rate due to their importance in predicting the growth of private domestic investment in an economy.

Model Specification

III. METHODOLOGY

The specification of this model follows the theoretical framework of debt overhang. The debt overhang hypothesis is valid for developing countries, by focusing on the impact of external debt on the domestic investment levels of the countries. To model the potential persistency in the level of domestic investment, dynamic investment equations involving the System-GMM approach developed by Blundell and Bond (1998) were employed. The system-GMM captures the potential endogeneity of regressors and as well reverses causality generating a large number of instruments for endogenous variables in the model. The model expressing how external debt affects domestic investment in developing nations was specified as:

 $inv_{it} = \tilde{\beta}_0 + \beta_1 inv_{it-1} + exd_{it} + \delta Z_{it} + u_i + \lambda_t + \varepsilon_{it}$

1

Where; inv_{it} = gross fixed investment, exd_{it} = external debt, and Z_{it} = control variables. The control variables comprise trade openness, the growth rate of GDP, government consumption, financial development,

and inflation rate. The model was utilized in the work of Dinci and Olajide (2021) with modification. In their studies, the equation was modified thus:

INV = f(EXD, RGDP, PLR)

Where INV is the investment, EXD is the external debt, RGDP is the real gross domestic product and PLR denotes the prime lending rate. However, to capture the objectives of this study, equation 2 above is further modified in functional form as follows:

PDI = f(EXD, EXDS, DD, DDS, INR, EXR)

3

2

In linear function, the model is specified as:

 $PDI_{t} = \phi_{0} + \phi_{1}EXD_{t} + \phi_{2}EXDS_{t} + \phi_{3}DD_{t} + \phi_{4}DDS_{t} + \phi_{5}INR_{t} + \phi_{6}EXR_{t} + \mu_{t}$ In the log function, it is modelled thus:

 $LPDI_{t} = \emptyset_{0} + \emptyset_{1}LEXD_{t} + \emptyset_{3}LEXDS_{t} + \emptyset_{3}LDD_{t} + \emptyset_{4}DDS_{t} + \emptyset_{5}INR_{t} + \emptyset_{6}LEXR_{t} + \mu_{t}$

Where, PDI = Private domestic investment, EXD = External debt, EXDS = External debt service, DD = Domestic debt, DDS = Domestic debt service, INR = Interest rate, EXR = Exchange rate, ϕ_0 = constant term, ut = error term and ϕ_{is} are the parameters of the regression equations.

A Priori Expectation

Theoretically, the study expects all the independent variables except external and domestic debt servicing and interest rates to have a positive relationship with private domestic investment (PDI). A priori expectation behaviour expression will be: $\varphi_1 > 0$, $\varphi_2 < 0$, $\varphi_3 > 0 < \varphi_4 > 0$, $\varphi_5 < 0$, $\varphi_6 > 0$.

IV. Results and Discussions

The results obtained by engaging econometric techniques in the study are presented and discussed in line with the objectives of the research below:

Descriptive Statistics

This test is employed to determine the information behaviour of the variables used in the research, relative to their normal distributions. The main focus of the summary statistics is on the mean, median, maximum, minimum, standard deviation, skewness, kurtosis and Jarque-Bera statistics. The results are presented below.

Table 1. Summary of Statistics

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	PDI	EXD	EXDS	DD	DDS	INR	EXR
Mean	6.725490	7.047489	4.499331	7.102483	4.850275	13.63889	4.330947
Median	6.583636	6.686892	4.560608	7.207750	5.180955	13.50000	4.843793
Maximum	10.15223	9.671255	7.034564	9.864880	8.094186	26.00000	6.000375
Minimum	2.634045	3.724488	1.342786	3.347797	0.431782	6.000000	1.199965
Std. Dev.	2.429241	1.383859	1.338848	1.901474	2.032200	3.761860	1.347761
Skewness	-0.151997	-0.104683	-0.178612	-0.377670	-0.269808	0.810330	-1.023718
Kurtosis	1.628569	2.620841	2.934697	2.147140	2.147110	5.095173	2.877770
Jarque-Bera	2.959853	0.281393	0.197811	1.946865	1.527909	10.52443	6.310405
Probability	0.227654	0.868753	0.905828	0.377784	0.465821	0.005184	0.042630
Sum	242.1176	253.7096	161.9759	255.6894	174.6099	491.0000	155.9141
Sum Sq. Dev.	206.5425	67.02731	62.73795	126.5461	144.5442	495.3056	63.57606
Observations	36	36	36	36	36	36	36

Descriptive Statistics

Sources: Computation from E-view 10

The results in Table 1 denote the summary of statistics of the variables used in the study. From Table 1, the mean shows the average value of each variable. From the results, the mean values of PDI, EXD, EXDS, DD, DDS, INR, and EXR are 6.725490, 7.047489, 4.499331, 7.102483, 4.850275, 13.63889, and 4.330947, respectively with exchange rate having lowest mean value followed by domestic debt service. The median unveils the middle value for each variable, and the values of the variables as mentioned above include 6.725490, 6.686892, 4.560608, 7.207750, 5.180955, 13.50000, and 4.843793, respectively. The maximum and minimum as shown in the summary statistics tell us the maximum and minimum values for each of the variables. From the

results, the variable with the maximum value is interest rate while the one having minimum value is domestic debt service. The standard deviation reveals the deviation from the sample means for each of the variables.

Considering the skewness, the value of normal skewness is 0. From the table, PDI, EXD, EXDS, DD, DDS, and INR have the value of 0, implying that the series is normally distributed while EXR is not. Kurtosis statistic measures the peakedness and flatness of series distribution and with the kurtosis of 1.628569, 2.620841, 2.934697, 2.147140, 2.147110 and 2.877770 for PDI, EXD, EXDS, DD, DDS, and EXR, respectively which are lower than kurtosis sample statistic of 3 because a value of 3 implies that the distribution is normal (Mesokurtic). But with fewer values, it implies that the distribution mirrors normal skewness and platykurtic because the values are less than 3, though another variable such as INR is leptokurtic (not normally distributed). Thus, all the variables except INR have long right tails (negative skewness) and leptokurtic because their kurtosis statistics exceed the sample statistics of 3. Jarque-Bera measures the difference between skewness and kurtosis with those from normally distributed variables. From the Jarque-Bera statistics, PDI, EXD, EXDS, DD, DDS, INR, and EXR have statistics of 2.959853, 0.281393, 0.197811, 1.946865, 1.527909, 10.52443, and 6.310405, respectively; while their associated p-values include 0.227654, 0.868753, 0.905828, 0.377784, 0.465821, 0.005184, and 0.042630, respectively. These results revealed that all the variables except INR are normally distributed.

Unit Root Test

To unveil the integration rank among the variables employed in the research, the unit root test is conducted using the Augmented Dickey-Fuller (ADF) stationarity test. The results are presented below.

Level			First Difference			
Variables	ADF Statistic	5% CV	ADF Statistic	5% CV	Remarks	Rank
LPDI	-1.257190	-3.548490	-4.000015	-3.548490	Stationary	I(1)
LEXD	-2.046641	-3.548490	-4.205303	-3.548490	Stationary	I(0)
LEXDS	-2.019794	-3.544284	-5.454311	-3.548490	Stationary	I(1)
LDD	-1.941130	-3.544284	-4.743891	-3.548490	Stationary	I(1)
LDDS	-3.448501	-3.548490	-5.610048	-3.548490	Stationary	I(1)
INR	-3.921068	-3.544284			Stationary	I(0)
LEXR	-2.080031	-3.544284	-6.862824	-3.548490	Stationary	I(1)

Table 2: ADF Unit Root Estimation Trend and Intercept

Sources: computation from E-view 10

Table 2 above, depicts the ADF stationarity test results. The results indicated that all the variables except interest rate were non-stationary at levels; but at first differencing, the non-stationarity variables became stationary. These arguments are supported by the ADF statistics and their p-values, implying that the variables possess long-run properties; and that their mean, variance, and covariance are constant over time.

Autoregressive Distributed Lag (ARDL) Model

The ARDL bounds test is used to test for long-run and short-run coefficients of the employed variables. It becomes useful as the stationarity test shows mixed order of integration among the variables. The results are given below:

F-Bounds Test		Null Hypo	Null Hypothesis: No levels of relationship				
Fest Statistic	Value	Signif.	I(0)	I(1)			
			Asymptotic: n=1000				
F-statistic	9.201492	10%	1.99	2.94			
X	6	5%	2.27	3.28			
		2.5%	2.55	3.61			
		1%	2.88	3.99			
Actual Sample Size	33		Finite Sample: n=35				
		10%	2.254	3.388			
		5%	2.685	3.96			
		1%	3.713	5.326			

Table 3: ARDL Bounds Test

Sources: Computation from E-view 10

Table 3 conveys the results of the long-run equilibrium relationship among the variables under consideration. From the results, there is evidence of a long-run relationship among the variables.

Table 4. ANDL Long-tun Test					
Levels Equation	Equation Image: Constant and No Trend Inrestricted Constant and No Trend Image: Coefficient Image: Coefficient Std. Error t-Statistic Image: Coefficient <				
Case 3: Unrestricted Con	stant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
LEXD	-0.839746	0.109620	-7.660544	0.0000	
LEXDS	-0.257265	0.081587	3.153235	0.0070	
LDD	0.302964	0.187482	-1.615968	0.1284	
LDDS	-1.704191	0.154632	11.02096	0.0000	
INR	-0.022843	0.013646	-1.673910	0.1163	
LEXR	0.159938	0.121305	1.318480	0.2085	

Sources: Computation from E-view 10

Table 4 above unveils the results of the ARDL long-run coefficients test between the public debt component and private domestic investment using the variables such as LEXD, LEXDS, LDD, LDDS, INR and LEXR. The estimation results indicated that external debt (LEXD), external debt service (LEXDS), and domestic debt service (DDS) have negative and significant effects on private domestic investment (LPDI). Contrarily, the results revealed that interest rate (INR) exerts a negative and insignificant impact on private domestic investment in Nigeria. More so, it is shown that domestic debt (LDD) and exchange rate (LEXR) have positive and insignificant influences on LPDI. These claims are supported by the coefficients and p-values estimated from the ARDL long-run coefficient test. From the test, the coefficients of LEXD, LEXDS, LDD, LDDS, INR and LEXR are -0.8397, -0.2573, 0.3030, -1.7042, -0.0228, and 0.1599, respectively; while their corresponding p-values are 0.0000, 0.0070, 0.1284, 0.0000, 0.1163, and 0.2085, respectively.

The result of the external debt contradicts the debt cycle theory, which upheld that external debt assists in financing public investments and paying interest; implying that an increase in external debt raises domestic savings and hence, supports a significant part of private investments. But if the external debt becomes excessive, it crowds out private domestic investment thereby leading to a negative effect of debt as in the case of this result. Similarly, the results also negate the finding of Arsene, Luc and Desire (2020) that studied the effect of external debt on domestic investment in sub-Saharan Africa and found a significant positive effect of external on the dependent variable. More so, the result of the external debt servicing is in line with the debt overhang theory suggests that if a country is highly indebted to the extent that the debt is more than its repayment capacity, the debt service will strangulate private domestic investments and hinder economic growth (Gordon & Cosimo, 2018). The result is also in line with the finding of Erdal (2012) who studied the effect of external debt service on the growth of the domestic economy and found a negative relationship between the variables.

Furthermore, the result estimated for the domestic debt is also in tandem with the debt cycle theory of public debt which postulated that domestic debt helps firms to raise funds domestically; and thus, enhance domestic investment. This is because domestic savings increase and support significant investment financing. Unlike the theoretical exposition, the result contradicts the finding of Dinci and Olajide (2021) that studied the effect of domestic debt on domestic investment and found a negative relationship between the two variables.

ECM Regression			regression	
Case 2: Restricted Constant	t and No Trend			
Case 2. Restricted Constant				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LEXD)	-0.153147	0.027465	-5.575990	0.0001
D(LEXD(-1))	0.233544	0.051798	4.508752	0.0005
D(LEXDS)	-0.135875	0.025971	5.231766	0.0001
D(LDD)	0.083415	0.092674	0.900085	0.3833
D(LDD(-1))	-0.119897	0.098786	-1.213709	0.2449
D(LDD(-2))	0.401726	0.088385	4.545191	0.0005
D(LDDS)	0.602018	0.059664	10.09018	0.0000
D(LDDS(-1))	-0.214294	0.072181	-2.968837	0.0102
D(INR	-0.307835	0.053741	-5.728181	0.0001
D(LEXR)	0.025840	0.060421	0.427662	0.6754
D(LEXR(-1))	-0.144504	0.047559	-3.038400	0.0089
CointEq(-1)*	-0.723642	0.068866	-10.50799	0.0000
R-squared	0.883024	Mean depen	ident var	0.212301
Adjusted R-squared	0.821751	S.D. dependent var 0.133110		0.133110
S.E. of regression	0.056198	Akaike info	Akaike info criterion -2.64457	
Sum squared resid	0.066323	Schwarz cri	Schwarz criterion -2.100386	
Log likelihood	55.63542	Hannan-Qu	inn criter.	-2.461469
Durbin-Watson stat	2.393882			

Table 5: ARDL Error Correction Regression

Sources: Researcher's computation from E-view 10

Table 5 denotes the result of ARDL ECM estimation. The results revealed that external debt, external debt service, interest rate and exchange rate have a negative and significant effect on private domestic investment while domestic debt and domestic debt service exerted a positive and significant impact on private domestic investment in the short-run in Nigeria. These claims are revealed by the coefficients and p-values of the variables considered. The results estimated showed that the coefficients of LEXD, LEXDS, LDD(-2), LDDS(-1), INR and LEXR(-1) are -0.153147, -0.135875, 0.401726, 0.602018, -0.307835 and -0.144504, whereas their p-values include 0.0001, 0.0005, 0.0001, 0.0000, 0.0001 and 0.0089, respectively. More so, the error correction term [ECT(-1)] has a value of -0.723642 and a p-value of 0.0000. The result implies that the speed of adjustment in the correction of short-run deviation towards long-run equilibrium relationship annually is 72.4%.

Diagnostic Tests

The diagnostic tests are generally utilized to test for structural serial correlation, stability and validity in the parameters of the model via the applications of the LM serial correlation test, ARCH heteroscedasticity and CUSUM test as advocated by Pesaran and Pesaran (1997). The results are given in Table 6 below.

Tuble 0. Diugnostie Tests						
S/N	Diagnostic test	Obs*R-	Prob.	Remarks		
		squared	Chi-			
		_	Square(2)			
1.	Serial Correlation LM Test	2.684056	0.1014	No evidence of serial correlation in the model		
2.	Heteroskedasticity Test:	0.026944	0.8696	No evidence of heteroscedasticity in the model		
	ARCH					
Server Grand to the form E in 10						

Table 6: Diagnostic Tests

Sources: Computation from E-view 10

The results in Table 6 showed evidence of no serial correlation and heteroscedasticity in the model used for this investigation as justified by the Obs*R-squared and p-values.

Policy Implication of the Results

The estimation results as presented in Table 4 showed that external debt, external debt service, and domestic debt service exert a negative and significant impact on private domestic investment. It also revealed that interest rates negatively and insignificantly affected private domestic investment. More so, the results indicated that domestic debt and exchange rate have positive and insignificant influences on domestic investment. By implication, it is on average estimated that a 1% increase in external debt, external debt service, domestic debt, domestic debt service, interest rate and the exchange rate will decrease private domestic investment by 0.84%, 0.26%, 1.70%, and 0.023%, respectively while 1% improvement in domestic debt and exchange rate will cause private domestic investment to increase by 0.30% and 0.16%, respectively in Nigeria.

V. Recommendations and Conclusion

Since the result showed that external debt exerts an insignificant negative effect on private domestic investment in Nigeria, the government should re-evaluate the projects upon which the contracted external loans are utilized, to determine its prudent use in the economy. In so doing, external debt will effectively be put into use leading to its positive effect on domestic investment. More so, having revealed that external debt service significantly and negatively affected private domestic investment; government should curtail further contraction of external debt in Nigeria. Any further external debt contraction will lead the nation-state into debt overhang, where future borrowing becomes almost impossible for the country. Furthermore, having found that domestic borrowing, as it does not harm private domestic investment growth in the economy, though prudent use of the debt is still required for it to contribute significantly to domestic investment. In conclusion, knowing well that prudent use of public debt makes debt service to public borrowing easier for a nation; this study, well researched has made its findings and policy recommendations. Therefore, the study believes that if the policy recommendations are adequately implemented, it will go a long way in solving public debt crises and hence, improves private domestic investment growth in the Nigerian economy.

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