

Does Budget Deficit Financing Crowd-in Private Investment in Nigeria? An Outlook of the Neoclassical Hypothesis

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ABSTRACT: The paper empirically investigates whether budget deficit financing Granger Cause private investment in Nigeria, employing annual data covering the period of 1980 to 2014 incorporating ADF and PP for the unit root and Pairwise Granger Causality tests as the means of statistical inference. The result of the ADF and PP revealed that the series are not stationary at the level value and became so after first differencing that is, they are integrated of other one I(1). The result further discloses that, there exists bidirectional causality running from private investment to fiscal deficit, government expenditure and government revenue while same bidirectional causality from exchange rate to private investment and we recommend that financing of deficit since it is unavoidable in most of LDCs economy including Nigeria should be done in such a way that can engage untapped human and natural resources thereby leading to increased productivity and government revenue via corporate taxation.

Keywords: Budget, Deficit, Financing, Granger, Cause, Private, Investment, Outlook, Neoclassical, Hypothesis

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I. INTRODUCTION

The growing fiscal deficit in Nigeria over the years has been seen to have negatively affect macroeconomic stability caused by constant oil glut that happen on frequent basis in international oil market. This negative effect reflects on most of the macroeconomics variables largely evidenced by persistent depreciation of the local currency (Naira), high rates of inflation, unemployment, undue expansionary monetary and credit aggregates, low saving and investment among others (Ekpo et al 2004). However, the era of 1970's and 1980's witnessed the oil glut in the world oil market which began to collapse. The resultant fall in oil exports and prices were reflected in government revenue. For example, crude oil prices which rose rapidly from US \$20.94 per barrel in 1979 to US \$36.95 in 1980 and US \$40 in 1981 fell to US \$29 in 1983 and as low as US \$14.85 in 1986. With these effects, serious setbacks were witnessed in the fiscal position (annual budgets) of the country. Fiscal deficit stood at ₦1, 975.20 million in 1980 and in 1981 it rose to ₦3, 902.10 (CBN, 2013). Consequently, several macroeconomic policies were adopted to trim down over reliance on oil export and import with the aim of cutting government expenditure and over reliance on imports, reduction in public wages and salaries among others, little positive impact were actually achieved. The country continued to increase with the problems of unemployment, currency overvalued (Naira), capital flight, debt crisis, inflation and domestic absorption to be greater than her GDP. The level of external reserves became inadequate in terms of meeting local demand leading to massive external borrowing to keep up the country to undertake her developmental plans in order to maintain it consumption and investment. This implies that government expenditure was rising above her income (revenue). For instance, the deficit of 1981 stood at 6.6 percent to GDP ratio (CBN, 2013).

In Nigeria several deficits were recorded since independence, the concern ones to review here begin from 80s to 2014. Budget deficit stood at ₦1, 975.20 million in 1980 while the rate of inflation during the same period was 9.9%. Inflation rose from 9.9% to 20.9% in 1981 when budget deficit increased from ₦1, 975.20 million in 1980 to ₦3, 902.10 million in 1981. Subsequently there was a decline in the rate of inflation (even though budget deficit increases) in 1982 from 20.9% in 1981 to 7.7% in 1982 when budget deficit augment from ₦3,902.10 million in 1981 to ₦6,104.10 in 1982 respectively, representing 56.6% increase during the period (CBN, 2013). However, budget deficit shows a drastic declined from ₦6, 104.10 in 1982 to ₦3, 364.50 in 1983 which represented 44.9% reduction in budget deficit and it (fiscal deficit) further declined by 20.9% when the deficit reduced to ₦ 2,660.40 in 1984, even though the economy still suffers from structural deterioration ranges

from mass unemployment, oil price shock in the international market, large imports, low GDP growth among others.

But still under the same period under reviewed prices of goods and services rose from 7.7% in 1982 to 23.2% in 1983 and increased further to 39.6% in 1984 (CBN, 2013). Following the 1984 record, fiscal deficit constantly continues to appreciate from 1985 up to 1994. During these reviewed periods several economic sectors in the country perform beyond expectation, as the public sector continue to retained much of the economic responsibilities that need to restructure the economy. And such brings about serious debate across the country on the position of the Nigeria economy that leads to the establishment of Structural Adjustment Programs (SAP). SAP came up with a number of policies to including deregulation foreign exchange, liberalization of trade and privatization of state owned enterprises (SOEs) in order to promote export and GDP growth to tackle the menace of the fiscal deficit in the country, while general price keep on fluctuating with the highest inflationary rate of 57.2% was recorded in 1993 and the lowest rate of inflation of 5.4% transpire in 1986 (CBN, 2000).

However, Nigeria recorded budget surplus in 1995 and 1996. It was in 1995 when budget surplus in Nigeria stood at N1billion that the highest rate of inflation of 72.8% was recorded, living the economy still with serious poverty and unemployment, low investment and savings among others. But inflationary rate falls from 72.8% in 1995 to 8.5% in 1997 when Nigeria recorded budget deficit of N5billion in 1997. Budget deficit remained uncontrolled between 1997 and 2009 amidst fluctuating inflation during the same period. Budget deficit rose from N810, 020.70 from 2009 to N1, 105,309.78billion in 2010 while inflation rate fell from 27.8% from 2009 to 13.72% in 2010. Budget deficit attained its highest value of N1,710,267.20 in 2012 coupled with a single digit inflation of 8.2%. This budget deficit figure represents a slight proportional increase of 25.4% relative to 23.4% change in budget deficit between 2010 and 2011 Deficit Profile (CBN, 2012).

According to World Bank (2012) high fiscal deficit in 2009 to 2010 have been reduced significantly in Nigeria. The general government budget in Nigeria was in surplus by an estimated of 4.7 percent of GDP for the year 2008, but then move into deficit of 6.6 percent in 2009 following decline in oil prices. The budget deficit in 2009 was financed by the excess crude oil account (5.7 percent of GDP or \$12.6 billion). In 2010 the government deficit still remained high at 5.7 percent of GDP, despite the recovery in oil price, due almost entirely to strong increases in federal expenditure that were finance by a higher federal deficit (borrowing) and a further draw down of excess crude account that almost completely depleted its balance of payment by the end of the year.

Fortunately, the 2011 fiscal year brought much needed progress toward consolidation. In the year 2011, the actual federal expenditure grew by less than 7 percent in nominal terms, representing a decline of 1.8 percent of real terms. The progress toward government consolidation in 2011 would have been much more drastic had it not been for a mushroom in the subsidy payment that reached 4.6 percent of GDP, and understandably became the focus of a major scandal in the country. The bank further (World Bank) further point out that, in 2012 the preliminary estimate of government deficit is 1.9 percent of GDP, representing continued progress in consolidation despite lower the expectation in government revenues. The draft 2013 framework propose even further consolidation; however, there are significant risk to this picture coming from oil prices uncertainty, as well as political issues/conflict that could affect the fuel subsidy payments and ability of the government to accumulate surplus revenue in its reserves. Following the Paris Club restructuring, Nigeria still has a strong debt position that can be used to meet some of the Balance of Payments (BOP) and budgetary challenges described above in the short and medium term. External sovereign debt remains less than 3 percent of GDP, while domestic debt reached 16 percent (World Bank, 2012).

However, following the prolong fiscal imbalances that last for more than three decades in Nigeria have been considered in the literature to be associated with too much government regulation in the economy. Instead of such deficit financing to be allocated to the real sector for further productive services (and related capital expenditure such as roads construction and power/energy that constitute some of the critical infrastructure development for effective growth) that enhance the growth rate of real GDP and encourage export promotion that can improve fiscal balances (operation) through increase in foreign earning, the greater part of the resources were used to increase transfer payment, administrative maintenances, debt servicing (debt to debt payment), public treasury embezzlements that associate with over invoicing and corruption practices among others which certainly have an adverse effect on investment rate (Isah, 2012). On another submission by World Bank (1996) assert that the excessive and prolong deficit financing through the creation of high powered money may negate the attainment of macroeconomic stability, which may in turn affect the level of desired investment in an economy and thereby stripe growth. Major determinant that is mostly directly affected by macroeconomic policy is investment, both public and private such macro-economic policies involved the deliberate manipulation of policy instruments, such as monetary policy, government fiscal operations, exchange rate and trade policies, pricing and environmental policies for the purpose of achieving broad macroeconomic of relative price stability, high level of employment, economic growth, equitable distribution of the national income and

balance of payment equilibrium. These are macroeconomic indicators upon which investor's confidence, expectation and decisions on whether to invest or not mostly depend upon.

The mismatched between theoretical expectation and practical performance of the fiscal responsibilities has posed serious problems in developing countries including Nigeria. Fiscal deficit remained the dominant position of the Nigerian annual budget that last for over three decades with attendant circumstances created by the oil glut in the international market. Most deficits in Nigeria were financed via Central Banking (CB) operation which in effect reduced fund to private investment in the financial market through interest rate regulation (Oluranti, 1999). The increase in interest rate caused by the government securities reduced saving and investment potentials. In Nigeria with considerable potential firms, such interest rate led to reduction in the size of firm's ability to borrow in a low return (interest rate) thereby leading to retrenchment of workers, inflation, low level of industrialization, low aggregate demand, low investment, and economic growth (Fredrick and Okeke, 2013). It is in the view of the highlighted problems the study is conceived against the background to examine whether fiscal deficit financing in Nigeria Granger caused private investment. To achieve this, the paper is structure into five section including this introduction as section one. Section two review theoretical framework with reference to neoclassical postulation and literature review, section three identify the possible methodology while section four offer data presentation and analysis and section five drawn conclusion and recommendation.

II. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

The Neoclassical economists simply suggest that fiscal deficit has a negative effect on macroeconomic performance, as government deficit persists it will result in higher inflation; discourage private consumption and investment; put off issuance of private bonds; slower growth rates of GDP and finally further current account deficit. The standard neoclassical models according to Douglas (1989), consists of three features. First, consumption of each individual is determined as the solution to an international optimization dilemma to borrow and lend according to the market interest rates; second, individual has finite life span. Each consumer belongs to specific cohort or generation overlap. Finally, market clearing is assumed in all periods.

To begin with, the neoclassical rationale, Diamond according to Douglas (1989) was the first to formally articulate the neoclassical model. Diamond asserts that permanent increase in the domestically holding debt to national income depresses the steady state capital-labor ratio. At the original interest rates, consumers are willing to hold the volume of physical capital and bonds, plus the new bonds. Rising interest rates consumers are willing to hold the original volume of physical capital and bonds, plus the new bonds. Rising interest rates stimulate savings and reduce investment until market equilibrium is established. The hypothesis of Diamond focuses only on changes in permanent deficit, and does not further elaborate how the temporary changes behave. He further deliberates their ideas thus; the impact of deficit may be extremely small, and possibly wicked in the short run. Economic lives are quite long, so incremental enlargement to life time wealth on current consumption (wealth effect) is small. If one considers public expenditure stable, the temporary deficit reduces government tax. This means that lower marginal tax rate, reduced capital income tax rates stimulate saving directly by raising the after tax rate of return. Temporary lower labor income tax rate induces inter temporal substitution, raising current income, and hence savings and private investment.

The fundamental implication of neoclassical model is that of permanent deficit (long run) to be detrimental to the growth rate of the macroeconomic variables (including private investment) and have negative correlation. If consumers are rational and foresighted, equally with access to perfect capital market, the permanent deficit continuously depresses the level of savings which results to lower capital accumulation and in turn lower investment and productivity. And temporary deficit has either a negligible or perverse effect on most economic variables (consumption, saving/investment and interest rates). If many consumers are myopic, the impact of permanent deficit remains qualitatively unchanged (Holger and Timo 2009). Another important conclusion of neoclassical economists as fall out by Yellen (1989), in standard Neoclassical macroeconomic models, if resources are fully employed, so that output is fixed, higher current consumption implies an equal offsetting or reduction in other forms of spending (including investment), thus, investment and/or net exports must be fully crowding out.

Fiscal Consolidation: The neoclassical economists vary in attitude and opinion on how the government deficit can be corrected. The most common terms of agreement depend on, the programs succeed in achieving their objectives of the government budget deficit reduction and how such programs affect the investment and real GDP growth rates in both short run and long run (Kevin, 2011). In optimizing the level of fiscal deficit the neoclassical focus on the level of government spending as percentage of GDP rather than concentrating on government deficit as percentage of GDP. To think for the solution on the government spending you must think on the size of the government. In an extreme Anarchy system, government makes large transfer payments and levies very high taxes that discourage work, saving, and investment, which in contrast means less economic

growth. To this complex system of anarchy system, the most advantageous size of the government spending as measured by percentage of GDP maximizes the rate of investment and real GDP growth rate over time (Kevin, 2011).

Economic Efficiency: This school believes that reduction in public spending as a percentage of GDP increase the potential of economic organization by shifting financial, physical, and labor resources from government to private sector (which could certainly improve private sector investment), which in turn bring greater economic efficiency and long term economic growth. Private sector is more efficient as they emphasis (neoclassical school) because, private firms and government pursued different goals in operations while private firms encourage competitive attitude that enhance the basis for growth of productivity and government on the other hand induces monopoly power.

A number of empirical studies have been conducted with different scholastic findings on the area of fiscal deficit private investment nexus, for instance: Madni (2013) over luck the role of fiscal policy for private investment in Pakistan between 1979-2012 using ADF and ECM applied for the short run dynamic. The result revealed that fiscal deficit, rate of interest, inflation and external debt are negatively related to private investment while exchange rate and export are positively impacted on investment. The paper recommends that to increase private investment, inflation and external debt needs to reduce as it affect cost of production and encourage domestic output to compete in international market. The work of Albato (2012) on the effect of government budget deficit on the crowding out of private sector investment in Saudi Arabia reveals that there is a crowding out of private investment by government budget deficit. The study further suggests that financing government budget deficits by borrowing from domestic markets reduces financial resources available to the private sector and discourages private sector investment. One important limitation of the report is that, it shows emphasis only on the domestic debt and fiscal deficit which mostly in developed countries did not considered as the major sources of financing budget deficit.

Emad and Abdullatif (2006) examine the relationship between public sector investment and private sector investment through government expenditures financed by government bonds in the Japanese economy. This study shows that deficit financing by bond issues does not crowd out private sector investment, and this financing technique may crowd-in. Thus the government increases bond issues and sells them in the domestic and international financial markets. This method does not affect interest rates because they are insensitive to government expenditures and they depend on interest rates levels in the international financial market more than in the domestic counter part because of globalization and integration among financial markets. Komain (2007) examine the relationship between government expenditures and economic growth in Thailand by employing the Granger Causality Test, the result discovered that government expenditure and economic growth are not cointegrated. Furthermore, the result proved a unidirectional relationship, as causality runs from government expenditures to growth. Fredrick and Okeke (2013) evaluate private investment and budget deficit by employing OLS and Granger Causality Test and authenticate that budget deficit crowd out private investment in Nigeria and that, the private investment Granger Cause fiscal deficit with feedback. And further suggest that stakeholders should reduce recurrent expenditure and increase capital expenditure in order to ensure friendly environment for private investment. Arguing in the same vein, Vincent and Clem (2013) showed that, there exists long run positive relationship between fiscal deficit and investment and also with the real growth of the national economy after handing annual data for the periods of 36 years (1970 to 2006). The estimated results reveal that a 1 percent increase in fiscal deficit leads to 0.267 percent increase in private investment, Vincent and Clem suggest that emphasis of government expenditure should be infrastructures that help capital formation instead of recurrent expenditure and also government programs should be finance through bond market as fund/savings can be mobilized and channeled to specific projects.

In their own study Benjamin and Olanipekum (2013) investigate the long run relationship between fiscal deficit and public debt in Nigeria and found that 1 percent increase in public debt resulted in an increase in 1.85 percent in fiscal deficit and therefore, 1 percent in fiscal deficit result into 0.08 percent in public debt in the study periods (1970-2011) in Nigeria. They further conclude that government should consider appropriate mix of domestic and external debt as a means of financing budget deficit. In another study by Ogba (2014) empirically examined the impact of budget deficit on trade balance in Nigeria using time series data and employed ADF Unit Root Test for stationary, JohansonCointegration for the long run relationship and Granger Causality Test. The findings revealed that a unidirectional relationship exist between budget deficit on trade balance. The study recommended that budget deficit have to be address in the country through demand management such as an increase in tax and reduction in government expenditure as a means of trade balance.

III. METHODOLOGY

Because the study is interested in finding out whether budget deficits financing Granger cause private investment we employed secondary data for the period of 1980 to 2014. The data were sourced from the publication of the CBN bulletin and World Bank data based for the period under reviewed. The adopted and modified form the work of Ogba (2014) and Vincent and Clem (2013) have been express in linear econometrics model below:

$$INV_t = \beta_0 + \beta_1 FD_t + \beta_2 GEXP_t + \beta_3 GREV_t + \beta_4 EXR_t + E_t \quad (3.1)$$

Estimation Techniques: The paper investigates the time series characteristics of the data employing Augmented Dickey-Fuller (ADF), as suggested in Dickey and Fuller (1979), and Phillips-Peron (Phillips and Peron, 1988) have been employed. For the ADF, the null hypothesis is that the variable being considered has a unit root against an alternative that it does not. The model for the ADF is as specified below:

$$\Delta y_t = \alpha + \beta T + \gamma y_{t-1} + \sum_{i=1}^p d_i \Delta y_{t-i} + \varepsilon_t \quad (3.2)$$

Where y_t is the variable being considered, T is the time trend (which is only allowed if significant), and ε_t is a random error term. The Schwarz Information Criterion is used in selecting p (the lag-length) after testing for first and higher order serial correlation in the residuals. The lagged variables serve as correction mechanism for possible serial correlation. The Phillips-Peron (PP) test uses models similar to the Dickey-Fuller tests but with Newey and West (1994) nonparametric correction for correcting possible serial correlation rather than the lagged variables method employed in ADF. Also Bartlett Kernel is used as an automated bandwidth estimator for lag truncation of the Newey and West nonparametric correction (Andrews, 1991). The test statistics of the PP have the same distribution as those of Dickey-Fuller with critical levels as provided by MacKinnon (1996).

Granger Causality Test

Granger causality test would be carried out to determine whether the variables (Fiscal deficit and investment) affect one another. According to Lin (2008) Causality Test is based on two primary assumptions that include First, the future cannot cause the past but the past causes the present or future. Second, that a cause contains unique information about the effect which cannot be fund elsewhere. One repercussion of Granger illustration theorem is that if two variables are cointegrated say X_t and Y_t , each will be 1(1) then either X_t must Granger caused Y_t or Y_t must Granger cause X_t . The basic Granger causality theorem would be presented in a Vector Autoregressive Model (VAR) model below:

$$\Delta y_t = \delta + \sum \alpha \Delta y_{t-1} + \sum \beta \Delta x_{t-1} + \varepsilon_t \quad (3.3)$$

$$\Delta x_t = \delta + \sum \gamma \Delta x_{t-1} + \sum \lambda \Delta y_{t-1} + e_t \quad (3.4)$$

Where Δ is the difference of operator, y_{t-1} is the investment rate and x_t is the fiscal deficit, α is the vector of the lag value of investment in equation (3.3), β is the vector of the lag value in equation (3.3), γ is the vector of the lag value of fiscal deficit in equation(3.4), λ is the vector of the lag value in equation (3.4), ε_t is the error term in equation (3.3) and e_t is the error term in equation (3.4).

The nature and direction of causality for the above equation depend on the estimated values of β and γ for the respective equations. For equation (3.12) fiscal deficit Granger cause private investment if $\beta \neq 0$ (i.e. statistically significant) while causality runs from investment to fiscal deficit, given that $\lambda \neq 0$.

IV. RESULTS AND DISCUSSIONS

Result of Unit Root Test

The precondition to be considered in time series analysis is to conduct post estimation test of unit root of the data set. The result of unit root test is presented in table 4.1. The table observes the null hypothesis of the unit root using ADF and PP tests (the null is the presence of the unit root against the alternative which consider to be otherwise). The null hypotheses were accepted at the level value because the absolute table value is greater than the absolute statistical value for both the ADF and PP. That is to say, the series have unit root at their level values. Based on the results therefore, the variables became stationary after placing the first difference. This revealed that, the series are integrated of order I(1).

Table 4.1: Result of Unit Root Test (ADF and PP)

Variables Series	Level Value		First Difference		Order of Integration
LINV	ADF -1.160 (2)	PP -1.081 [3]	ADF -4.703*** (2)	PP -4.739*** [3]	I(1)
FD	0.247 (2)	0.662 [3]	-4.918*** (2)	-4.855*** [3]	I(1)
LGEXP	0.038 (2)	0.036 [3]	-7.347*** (2)	-7.189*** [3]	I(1)
LGREV	-0.438 (2)	-0.047 [3]	-8.022*** (2)	-7.923*** [3]	I(1)
LEXR	-1.869 (2)	-1.845 [3]	-4.917*** (2)	-4.917*** [3]	I(1)

Note that *** indicate significant at 1% level and the figures in parenthesis and bracket represent maximum lag selection criteria based on SIC and Newey-West automatic were selected using Bartlett Kernel for the PP test.

Result of Pairwise Engle Granger Causality

Table 4.5 provides the result of Granger Causality test between private investment (LINV) and the explanatory variables namely: FD, LGEXP, LGREV and LEXR. The result shows that there is no direction of Causality between fiscal deficits (FD) and Private investment (LINV) but private investment Granger Cause fiscal deficits evident from the F-statistic value of 3.06830. On the other hand, government expenditure (LGEXP) does not Granger caused private investment (LINV) but private investment Granger cause government expenditure with F- value of 4.73821 and significant at 1% level.

Table 4.2: Observe Result of Granger Causality

Null Hypothesis	Obs.	F statistic	Prob.
FD does not Granger Cause LINV	35	0.91121	0.4136
LINV does not Granger Cause FD		3.06830*	0.0624
LGEXP does not Granger Cause LINV	35	2.23691	0.1255
LINV does not Granger Cause LGEXP		4.73821***	0.0169
LGREV does not Granger Cause LINV	35	0.57017	0.5719
LINV does not Granger Cause LGREV		10.7275***	0.0003
LEXR does not Granger Cause LINV	35	9.33086***	0.0008
LINV does not Granger Cause LEXR		0.26079	0.7723

Note that *** and * indicate 1% and 10% significant.

Source: Appendix V.

However, a bidirectional Causality runs from private investment (LINV) to government revenue (LGREV) without feedback, with approximate F-statistic of 10.73. This suggests that the higher the level of private investment in the country the greater the government revenue generated from corporate taxations and other related sources. Finally, exchange rate (LEXR) proved to reject the null hypothesis that it does not Granger cause private investment (LINV) and accept the alternative which says it Granger causes as pointed out by the F-statistic of 9.33086 but private investment (LINV) does not cause exchange rate.

Post Estimation Test:

Multicollinearity Test; Table 4.5 indicate multicollinearity test using Variance Inflation Factor. VIF has minimum number of 1 and once it is below 10 there is no ground to suspect multicollinearity. From the table it can be clear none of the series has number greater than 10. This can be clearly suggested that, there is no element of multicollinearity in the data set.

Table 4.3: Variance Inflation Factor

Variable	Coefficient	Uncentered VIF	Centered VIF
DFD(-1)	3.57E-08	1.526582	1.450957
DLGEXP(-1)	0.070657	9.300098	5.109445
DLGREV(-1)	0.045431	9.933924	6.810484
DLGREV(-2)	0.015530	3.437623	2.484347
DLGREV(-3)	0.007110	1.680100	1.320329
DLEXR(-1)	0.011708	2.334969	1.775369

DLEXR(-2)	0.012793	2.556000	1.924765
DLINV(-1)	0.039017	5.075815	2.232076
ECM(-1)	0.038244	2.529527	2.467139

Source: Appendix IV.

Ramsey Test for Model Specification;

To test for model specification a Ramsey test were employed so as to find out if the set of data actually fit in properly into the model and also to see if the model is adequate for our analysis.

Hypothesis formulation

H₀: the model is well specified

H₁: there is misspecification of model

Decision Rule If F tabulated > F calculated, we accept H₀

F-staistics (1, 20) = 2.52 F table = 2.57. Since the F tabulated is greater than the F calculated we accept H₀ and reject H₁, we concluded that the model is good and well specified.

Result of Normality Test;

The work also adopted the Jacque- Bera test of normality

Hypothesis Testing

H₀: $\delta_1 = 0$ (the error term follows a normal distributed)

Against:

H₁: $\delta_1 \neq 0$ (the error term does not follow a normal distributed)

At $\alpha = 5\%$ with 2 degree of freedom.

Test statistics:

Decision Rule: Reject H₀ if Jarque-Bera value greater than the chi square tabulated at 2 degree of freedom and accept H₁ if otherwise. From the result obtained form Jarque-Bera (JB) Test of Normality, JB = 1.73 which is shown in the appendix, and chi-square tabulated is 5.99147. Therefore, since 25.111 > 1.73 at 2(0.05) level of significance, we accept H₀ and conclude that the error term is normally distributed.

V. CONCLUSION AND RECOMMENDATIONS

The study empirically investigates whether budget deficit financing Granger coursed private investment in Nigeria putting ahead the neoclassical postulation as the basis for examining the applicability or otherwise in the country. As the school argued that deficit financing crowd out private firms' potential as the finance resources reduces the loanable fund available for investment. The results of the study therefore, revealed that financing budget deficit in Nigeria could not Granger coursed private investment in the country rather is the private investment that found to Granger coursed deficit financing, to say it in another way there exist bidirectional causality form private investment to government deficit. On the explanatory variables, private investment is found to have same bidirectional causalityto government expenditure, government revenue without feedback while exchange rate is found to have bidirectional causality with private investment.

Since as the prior expectation of the result as suggested by the neoclassical that budget deficit financing discourages private investment, and the result revealed bidirectional causality relationship, the study therefore recommend that financing of deficit since it is unavoidable in most of LDCs economy including Nigeria should be done in such a way that can engage untapped human and natural resources thereby leading to increased productivity and government revenue via corporate taxation.

Finally, economist, policy makers and other related agencies should put considerable in mind that deficit financing (source domestically) have secondary effect via interest rate and certainly that can reducedomestic investment and that can be undertake with caution.

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