Original Research Article

Debt Management and Economic Development in Nigeria (1981-2016)

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Abstract

Debt management remains a crucial issue to nations that took to debt for improving infrastructure and projects. The specific objectives of this study were to examine the effect of external debt, domestic debt, exchange rate and interest rate on economic development over the period of thirty-six years (1981 to 2016). Ex-post-facto research design was adopted for this study. Data were extracted from Central Bank of Nigeria Statistical Bulletin, National Bureau of Statistics, and Debt Management Office. The statistical tools employed include Co-Integration, Error Correction Model (ECM) and Ordinary Least Square (OLS) regression. The study found that external debt has significant effect, but it is negatively related in the short run and positively related in the long-run with economic development; domestic debt has significant effect, but it is positively related in the short run and negatively related in the long-run with economic development; exchange and interest rates have nonsignificant effect and have negative relationship with economic development in the short run, while in the long run, exchange and interest rates have significant effect, exchange rate has positive relationship while interest rate has negative relationship with economic development proxy with Real Gross Domestic Product. The implication of the findings is that proper debt management, taking cognizance of exchange and interest rates will enhance economic growth and development of the economy,. The study recommended that a country should take more of internal debt for short-term projects while external debt for long-term projects. Also, government should vigorously pursue policies that could favourably stabilize exchange and interest rates for the benefit of the nation.

JEL Classification Codes: M41 M48

1.0 INTRODUCTION

A nation took to debts to stimulate and encourage economic growth and development. Sulaiman and Azeez (2012) state that no government is an island on its own and it would require aid so as to perform efficiently and effectively. The debt of a nation is created by the act of borrowing. The debt of a nation entails external which are sourced from outside one's country and internal or domestic which is within ones country. Developing countries like Nigeria at early stages of development seek to borrow funds to augment what they have (Tajudeen 2012). The quest for economic growth and development compelled Nigeria to acquire external and domestic debts. The first major external loan of US$28 million by Nigeria was acquired from World Bank in 1958 to finance railway construction (Udeh, Ugwu, & Onwuka, 2016). Nigeria's journey into domestic debt dates back to 1948 (Gbosi, 1998). It was in that year that the first development stock of five hundred thousand naira (₦500, 000) only, was floated in Nigeria. But the first treasury bills and treasury certificates worth eight million naira (₦8, 000,000) and twenty million naira (₦20,000,000), respectively were issued in 1960 and 1968 (Adam, Sule, Ayo, & Ibrahim, 2016).

Management of debts incurred by any nation is important strategy to the purpose of the debt and settle accordingly as at when due. According to José and Jeffrey (2014), debt management is the process of establishing and executing a strategy for managing the government's debt in order to raise the required amount of funding at the lowest possible cost over the medium to long run, consistent with a prudent degree of risk. Proper debt management will pave the way for prompt repayment debts and stimulation of economic growth and development. Nigeria's total domestic debt outstanding stood at only ₦1.1 billion in 1970. It rose steadily to (₦8.2billion in 1980. Thereafter, it skyrocketed to ₦84.1 billion in 1990 (Adam, Sule, Ayo, & Ibrahim, 2016). The latest NBS data, however, disturbingly indicates that the Federal Government has already chalked up over $15billion in foreign debt and ₦14Tn (about $45billion) in domestic debt as at June 30th, 2017, (compare this with below $3bn and ₦1Tn, respectively after debt exit in 2006)(Boyo, 2017). Furthermore, a rising debt burden may constrain the ability of government to undertake more productive investment programmes like infrastructure, education and public health. Poor debt management has a way of affecting the economic development of a nation (Adegbote, Aiyadi, & Aiyadi, 2008).

Many developing countries borrow from both internal and external sources yearly without putting the adequate mechanism on the management of the debt (Amassoma 2011). Poor debt management could drastically affect the exchange rate, inflation rate, investment and level of economic development. Consequently, improper, neglect and inadequate attention to the management of the debt affects the cost of servicing public debt (domestic and external) which may expand beyond the capacity of the economy to cope, thereby impacting negatively on the economic development (Putunoi & Mutuku 2013).Most studies on debt management were conducted in developed countries like US, U.K, France (Chenery& Alan, 1966; Hoff & Stiglitz 1999; Hansen & Seshadri, 2013 etc.), and few from developing countries like Nigeria but were basically on external and domestic debts in relation to economic growth and development (Azeez, Kolapo, & Ajayi, 2012; Bamidele & Joseph, 2013). To the best of our knowledge, none of these studies has recognised exchange rate and interest rate in debt management in relation to economic growth and development. Also, none of the few extant

studies have taken longitudinalstudy from 1981 to 2016. This is the gap this study desires to fill.

The broad objective of this study is to investigates the effect of debt management on economic development in Nigeria, while the specific objectives are to examine the effect of external debt, domestic debt, exchange rate and interest rate on economic development.

2.0 REVIEW OF RELATED LITERATURE

Concepts of Economic Development

Economic development was originated in the post-war period of reconstruction initiated by the United States (US) in 1949, during the inaugural speech of President Harry Truman who identified the development of undeveloped areas as a priority for the west(Schumpeter & Backhaus, 2009). According to Al-faki (2006), economic development is defined as a sustained increase in living standards that implies an increase in per capital income, better education, health and environmental improvement. Osamwonyi (2007) defined economic development as multi dimensional process of a total upward structural shift of the social system in terms of a capacity and capability to produce, supply, distribute and consume goods and services required by a growing economy or society with changing tastes such that more efficient, higher and more equitable standard of living is attained and absolute poverty eliminated. According to Blakely and Leigh (2009), economic development encompasses a wide range of concerns including: an issue of more economic growth; involving the wise application of public policy that will increase a country's competitiveness; a code phrase for industrial policy; sustainable development that harmonizes natural and social systems; a vehicle for increasing wages, benefits, basic education, and worker training; a way to strengthen inner city and rural economies in order to reduce poverty and inequality; and lastly it embodies the range of job creation programs in response to the decline of federal domestic assistance. It is important to state that issue of economic development cannot be completely discussed without throwing light on economic growth. Economic growth, namely the increase in per capita income, and (if currently absent) the attainment of a standard of living equivalent to that of industrialized countries (Todaro & Smith, 2009). Whereas economic development is a policy intervention endeavour with aims of economic and social well-being of people, while economic growth is a phenomenon of marketproductivity and rise in Gross Domestic Product (GDP).Organization for Economic Co-operation and Development (OECD)(2014) defined Gross domestic product (GDP) as an aggregate measure of production equal to the sum of the gross values added of all resident, institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs).

Debt Management

Government incurs debt either by external or internal means so as to promote policies that will bring about economic development. Bamidele and Joseph (2013) described debt management as policy which seeks to alter the stock, composition, structure and terms of debt with a view to maintaining at any given time, a sustainable level of debt service payment. It establishes the rules and regulations to guide borrowing and management of the State's debts, as well as confirming the commitment of State government to comply with sound financial, fiscal and reserve management practices including full and timely repayment of debts, attainment of the cheapest borrowing cost at the best degree of risk.

Legal Framework for Debt Management in Nigeria

In the 1980s, the management of debt became a major responsibility of the Central Bank of Nigeria (CBN). This necessitated the establishment (setting up) of a Department in collaboration with Federal

Ministry of Finance to the management of external debt. Although, the debt management strategies and measures varied from time to time since the early 1980s when internal and external debt became pronounced. The Federal Government in the year 2001 established a semi-autonomous debt management office under the Presidency. Adepoju, Salau, and Obayelu(2007) opined that the creation of DMO consolidated the debt management functions in a single agency, ensuring proper coordination of the country's debt recording and management activities, including debt service forecast, debt service repayments, and advising on debt negotiation as well as new borrowings.

Sound international practices in public debt management require laws that clearly define and assign responsibilities to government institutions and agencies with respect to managing, issuing new debts, and carrying out other debt related activities for the government. In view of this, the National Debt Management Framework (2013-2017) outlined and explains the following set of legal instruments and their inherent provisions which provide the legal framework for public debt management in the country. The legal framework includes:

The Constitution of the Federal Republic of Nigeria, 1999 (as amended): The 1999Constitution vests on the National Assembly (NASS) the exclusive powers to make laws to regulate domestic and external borrowing in the country. The NASS also has the statutory mandate to approve, through appropriation, all domestic borrowing by the Federal Government, and by resolution, all external borrowing by all tiers of government in Nigeria.

The Debt Management Office (DMO) (Establishment) Act, 2003: This Act establishes the DMO as an autonomous government agency, charged with the responsibility of managing the country's public debt.

The Local Loans (Registered Stock and Securities) Act, CAP. L17 (LFN): This Act provides for the creation, issuance and redemption of registered stocks, Government Promissory Notes and bearer bonds for the purposes of raising loans in Nigeria by the Federal Government.

The Treasury Bills Act, CAP. T18 (LFN): This Act empowers the Federal Minister of Finance (FMF) to issue Treasury Bills through the CBN on behalf of the government and credit the Consolidated Revenue Fund (CRF) with the proceeds of the issuance.

The Treasury Certificate Act, CAP. T19 (LFN): This Act makes provisions which enable the FGN to raise short-term loans of not more than two (2) years tenor through the issuance of Treasury Certificates (TCs).

The Government Promissory Notes Act, CAP. G4 (LFN): The Act empowers the Federal Government to issue Promissory Notes to raise any sum of money by loan or repay any money borrowed by the government.

Investment and Securities Act (ISA), 2007: It gives legal backing to the Securities and Exchange Commission (SEC) and empowers it to regulate borrowing from the domestic capital market by all tiers of government and their agencies, as well as, private sector enterprises.

The Central Bank of Nigeria Act, 2007: This Act enables the CBN to, among other things, act as bankers to the government, register, discount or rediscount bonds issued by any tier of government and their agencies, being bonds, which have been publicly offered for sale and with maturity not exceeding three years, as well as, grant advances to the Federal Government, as may be appropriate.

Fiscal Responsibility Act (FRA), 2007: The FRA makes provisions, which seek to

promote fiscal discipline on the Federal and to some extent the State Governments and their Agencies, in the management of the nation's resources.

The Office of the Accountant-General of the Federation (OAGF): The OAGF, established under the Civil Services Re-organization Decree No. 43 of 1988, is responsible for the overall management of all receipts and payments of the Federal Republic of Nigeria (FRN); maintain and operate the Federation Account, the contingency revenue fund (CRF), Department Fund, Contingencies Fund and other public funds; provides cash backing for the operation of the Federal Government; and, undertake externalisation of debt servicing, amongst others.

External Debt
External debt entails debts owed to foreign nations or international institutions. There is abundant proof in the existing body of literature to indicate that foreign borrowing aids the growth and development of a nation. Soludo (2003) was of the opinion that countries borrow for major reasons. The first is of macroeconomic intent that is to bring about increased investment and human capital development while the other is to reduce budget constraint by financing fiscal and balance of payment deficits. Obadan and Uga (2007) stressed the fact that countries especially the less developed countries borrow to raise capital formation and investment which has been previously hampered by the low level of domestic savings. Ultimately the reasons why countries borrow boils down to two major reasons which are to bridge the savings-\investment gap and the foreign exchange gap. Chenery (1966) pointed out that the main reason why countries borrow is to supplement the lack of savings and investment in that country. For development to take place, it requires a level of investment which is a function of domestic savings and the level of domestic savings is

not sufficient enough to ensure that development takes place

Domestic Debt
Domestic debt involvesliability or debt incurred by a nation within the country. Oshandami (2006) defined domestic debt as debt instrument issued by the federal government and dominated in local currency. According to Abbas and Christensen (2007), domestic debt markets can help strengthen money and financial markets, boost private savings, and stimulate investment. This they said can be achieved with the use of government securities are a vital instrument for the conduct of indirect monetary policy operations and collateralized lending in interbank markets; the latter helps banks manage their own liquidity more effectively, reducing the need for frequent central bank interventions.The figures released by Nigeria's Debt Management Office (DMO) showed that Nigeria's domestic debt stock stood at about $43.185 billion or N7.25 trillion as at March 2015 (DMO, 2015; Omoh, 2015), ₦10.606 trillion as at 30 June 2016 (DMO, 2016), and is still increasing. .Meanwhile, As at October 2010, Nigeria's domestic debt stood at $21.8 billion having risen from$17.7 billion in 2009 (Adametal., 2016). Okwu, Obiwuru, Obiakor, and Oluwalaiye, (2016) noted that adequate deployment of domestic debt to key sectors of any economy could enhance short-run growth that might be possibly translated to long-run growth.Policies capable of reducing the size of the domestic debt relative to GDP and deposits, could exert a negative impact on financial market development, and complicate the exit from foreign aid (Abbas and Christensen 2007).Having examined some prior studies, I hypothesised that that domestic debt management will enhance economic growth and development.

Exchange Rate
The exchange rate is the price with which a country's currency isexchanged with that of

another country. It is the number of units of a country's currency that can buy another amount of units of another currency. Exchange rate determines whether or not a country must borrow. If the exchange rate in one country is high in relation to another country's own, it means that borrowing from that country will result to deficit. Also, depreciation of exchange rate tends to cause a shift from foreign goods to domestic goods. Hence, it leads to the diversion of income from importing countries to countries exporting through a shift in terms of trade, and this tends to have an impact on the exporting and importing countries' economic growth. Similarly, Hossain (2002) agreed that exchange rate helps to connect the price systems of two different countries by making it possible for international trade and also effects on the volume of imports and exports, as well as country's balance of payments position. Adeniran and Yusuf (2014) opine that exchange rate fluctuation is another important aspect of debt management. Since it cannot be easily determined by the monetary authority because of the flexible exchange rate regime, fluctuation in exchange rate must be taken into consideration before borrowing.

Interest Rate

The interest rate is one most important factor in debt management. Interest rate determines when, where and whether or whether not to borrow. In other words, if the rate of borrowing in a place is better than any other place, then it will be advisable to borrow there. Again if there is serious interest rate volatility, it will not be advisable to borrow. D'Adda and Scorcu (1997) found that a negative relationship between real rates of return and economic growth. Clearly, the horizon they consider is shorter than would be ideal for purposes of long-term analysis.Rioja and Valev (2002) showed that the relationship between financial development and growth is not a one-to-one monotonic relation and depends on their level of financial development andgrowth in the long-term. However, this

effect strongly depends on the country's level of financial development. For countries with relatively low financial development, exchange rate change has no significant effect.

Review of Related Empirical Studies

Several prior studies have investigated the relationship between debt management and economic growth and development. Some of the empirical reviews are as follows.

Amassoma (2011) on the effect of External Debt, Internal Debt and Economic Growth and development Bound in Nigeria using a Causality Approach, the VEC model revealed a unidirectional causality from economic development to external debt in Nigeria. Sulaiman and Azeez (2012) examine the effect of external debt on the economic growth of Nigeria using a model built for the study to proxy gross domestic product as the endogenous variable measuring economic growth as a function of external debt, ratio of external debt to export, inflation, and exchange rate proxy as the exogenous variables. The findings from the error correction method show that external debt has contributed positively to the Nigerian economy development.

Putunoiand Mutuku (2012) investigated the effects of domestic debt on economic growth in Kenya using quarterly time series data spanning 2000 to 2010. Their study established that domestic debt expansion in Kenya, for the period of study, has a positive and significant effect on economic growth and development. In view of this, the study recommended that the Kenyan government should encourage sustainable domestic borrowing provided the funds are utilised in productive economic avenues.Asher (2012) examined the impact of exchange rate fluctuation on the Nigeria economic development and growth for the period of 1980 − 2010. The result showed that real exchange rate has a positive effect on the economic development and economic growth.

Obansa, Okoroafor, Aluko, and Millicent (2013) examined the relationship between exchange rate and economic growth in Nigeria between1970-2010. The result indicated that exchange rate has a strong impact on economic growth. They concluded that exchange rate liberalization was good to Nigerian economy as it promotes economic growth. Azeez, Kolapo, and Ajayi (2012) investigated the effect of exchange rate volatility on macroeconomic performance in Nigeria from 1986 – 2010. They discovered that exchange rate is positively related to Gross Domestic Product

Udoka and Anyingang (2012) investigated the effect of interest rate fluctuation on the economic growth of Nigeria, 1970-2010, using two research hypotheses formulated to investigate the relationship between interest rate and economic growth and the difference in economic growth before and after interest rate deregulation regime in Nigeria. The ex-post facto research design was adopted for this study. The result of the findings revealed that: there existed an inverse relationship between interest rate and economic growth in Nigeria, meaning that increase in interest rate will decrease GDP of the country, thus retarding the growth of the real sector.

Ajayiand Oke (2012) investigated the effect of the external debt burden on economic growth and development of Nigeria. The statistical tool employed was OLS regression. The study found that external debt burden had an adverse effect on the national income and per capita income of the nation. High level of external debt led to the devaluation of the national currency, increase in the retrenchment of workers, continuous industrial strike and poor educational system. This led to the economy of Nigeria getting depressed. Sulaiman and Azeez (2012) conducted a study on the effect of external debt on the economic growth of Nigeria covering a period of 1970-2010. The statistical tools used include

Ordinary Least Square (OLS), Augmented Dickey-Fuller (ADF) Unit Root test, Johansen Co-integration test and Error Correction Method (ECM) for the empirical analysis. The result showed that external debt had contributed positively to the Nigerian economy. Atique and Malik (2012) examined the impact of domestic and external debt on the economic growth of Pakistan separately over a period of 1980-2010 using Ordinary Least Square approach (OLS) to co-integration. The study revealed significant inverse relationship between domestic debt and economic growth, and external debt and economic growth.

Hansen and Seshadri (2013) examined the relationship between real interest rates and economic growth analyze long-span data on real interest rates and productivity growth with the focus on estimating their long-run correlation. The evidence points to a moderately negative correlation, meaning that real interest rate is mildly countercyclical, although the estimates are not precise.

Okon, Abu, and Clement (2013) investigated the relative impact or potency of both external and domesticdebts on the performance of the Nigerian economy with emphasis on which of the debt type exert more impact or influence on the major macroeconomic variables of per capita GDP and gross domestic investment. Time series data were obtained from various sources from1970 to 2011 and were further subjected to series of econometric analysis. The result revealed that external debt is superior to domesticdebt in terms of economic growth, external debt and not domestic debt crowd-out domestic investment in Nigeria and Interest rate is a negative and significant determinant ofdomestic investment in Nigeria. It concluded that government should have recourse to domestic market-based borrowing in order to help mobilize domestic saving and stimulate domestic investment in Nigeria.

Udeh, etal., (2016) investigated the impact of external debt on economic growth in Nigeria for a period of 1980-2013. The model was formulated, and data were analysed using Ordinary Least Square. Diagnostic tests were conducted using Augmented Dick Fuller Unit Root Test, Co-integration and Error Correction Model. The study revealed that external debt had a positive relationship with Gross Domestic Product in short run, but a negative relationship inthe long run. Also, while External Debt Service Payment had a negative relationship with Gross Domestic Product, Exchange Rate had a positive relationship with it.

Adam,etal.,(2016) examined the impacts of National Debt on Economic performance in Nigeria for the period of 1970 – 2013. The statistical tool employed was multiple least square(s) method. Results showed that domestic debt has a negative but insignificant impact on economic growth in Nigeria, Mbah, Umunna and Agu (2016) investigatedthe impact of external debt on economic growth of Nigeria. Using the ARDL bound testing approach to cointegration and error correction models for the periods 1970 – 2013; in order to investigate the existence of long-run equilibrium relationship between the variables. In addition, the Granger causality test was also used to check for the direction of causality among the variables. The found a long-run relationship among the variables and external debt impacts negatively significant on output. It also showed unidirectional causality between external debt and economic growth.

Abula and Mordecai (2016) investigated the impact of public debt on the economic development of Nigeria using annual with the time frame of 1986 to 2014. The statistical test was the Augmented Dickey-Fuller test, Johansen co-integration test, Error Correction Method (ECM) and the Granger Causality test. The Johansen co-integration test results revealed the presence of a long-run relationship among the variables viz; external debt stock, domestic debt stock, external debt servicing, domestic debt servicing and economic development (proxied with GDP per capita) in Nigeria. Also, The ECM results revealed that external debt stock and external debt servicing have an insignificant negative relationship with economic development in Nigeria Igbodika, Chukwunulu and Andabai (2016) empirically examined that relationship between domestic debt and the performance of Nigerian economy using data spanning (1987-2014). Formulated hypotheses were tested using Ordinary Least Square (OLS) regression. The study showed that interest rate has a significant inverse relationship with Gross Domestic Product in Nigeria, and , there is a positive significant relationship between domestic debt and Gross Domestic Product in Nigeria.

Okwu, etal.,. (2016) examined the effects of domestic debt on economic growth in Nigeria during the 1980-2015 periods. The study employed unit root test, co-integration and ECM. The study revealed significant short- and long-run positive effect for DDS; negative effect for domestic debt servicing expenditure DDSE but the insignificant negative effect for bank lending rates (BLR).

Olasode and Babatunde (2016) empirically investigated external debts and economic growth in Nigeria using autoregressive distributed Lag model. It covered a period of 1984-2012,and statistical tools includeUnit Root Test,and Co-integration Tests conform that all the variables exhibit Stationarity at first differenced and the existence of long-run relationship between the variables was also confirmed by the Johansen Cointegration test carried out. The result from the ordinary least squares method used confirms the existence of a dual behaviour as the lag 1 of external debts has positive while external debts of the

present year posed a negative effect on the performance of the economy.

Igbodika, Chukwunulu and Andabai (2016) empirically examined that relationship between domestic debt and the performance of Nigerian Babu, Kiprop, Kalio&Gisore (2015) investigated the effect of domestic debt, as a share of Gross Domestic Product (GDP), on economic growth in the East Africa Community (EAC) over the period 1990-2010. The statistical tools consist of Unit roots, Hausman test and panel fixed-effects model. The results showed that domestic debt has a significant positive effect on per capita GDP growth rate in the EAC.

3.0 METHODOLOGY

Theoretical framework and Model Specification

This study is anchored on the economic base theory. It is one of the economic development theories, which viewed economic development as equivalent to the rate of local economic growth measured in terms of changes in the local levels of output, income, or employment. Basic view of the economic base theory was that the rate of economic growth of a country is determined by the amount of the increase in exports from the region. Economic-based concepts originated with the need to predict the effects of new economic activity on cities and regions (Schaffer, 2010). The essential dynamic of the theory is the response of the basic sector to external demand for local exports, which, in turn, stimulates local growth. The theory's major strengths are its popularity as a basis for understanding economic development and a tool for prediction (Malizia & Feser, 1999). Its major weakness is its inadequacy as a theory for understanding economic development, especially in the long term. Economic base theory strongly supports that with proper utilization of public debt can bring about economic development and growth of the economy.

Model Specification

Model specification entails the determination of the endogenous and exogenous variables that needed to be included in the model and the apriori expectation about the sign and the size of the parameters of the function (Brooks 2008; Gujarati & Porter, 2009; Kozhan, 2010) as stated in Emeh and Appah (2013).The model for this study is adapted from Putunoi and Mutuku (2013) which was specified as:

$$LNGDP = \beta_0 + \beta_1 LNDO + \beta_2 LNPSC + \beta_3 LNINT + \mu$$

Where RGDP= Real Gross Domestic Product
DOD= Domestic Debt
PSC= Private Sector Credit
INT= Interest Rate
For the purpose of this study, our model is specified as:

$$LNRGDP = X_0 + X_1 LNEXT + X_2 LNINT + X_3 ER + X_4 IR + \mu$$

Where;
X_0= Constant.
X_1, X_2, X_3 and X_4 = Coefficients.
LNRGDP= Natural logarithm of real Gross Domestic Product.
LNEXT= Natural logarithm of External debt.
LNINT= Natural logarithms of Internal debt..
ER= Exchange rate
IR = Interest rate.
μ = Stochastic disturbance
Our apriori expectation is stated as: $X_1 > 0$; $X_2 > 0$; $X_3 < 0$ and $X_4 < 0$

Research Design

This study adopted ex-post-facto research design. It is a longitudinal study covering periods of thirty-six (36) years (1981 to 2016). Debt management is the independent variable proxy with external debt, internal debt, exchange rate and interest rate, while Economic development is the dependent variable proxy by Real Gross Domestic Product (RGDP). This study obtained data

from secondary sources. Data on external and domestic debt were obtained from Debt Management Office handbook. Data on economic development is proxy by Real Gross Domestic Product (RGDP), interest rate and exchange rate were obtained from Central Bank of Nigeria Statistical Bulletinrespectively for the dependent and independent variables.

Method of Data Analysis
The statistical tools used include Ordinary Least Square (OLS) regression, Unit Root test, Co-Integration and Error Corrections Model (ECM). The diagnostic test includesRamsey RESET test for misspecification and Breusch–Pagan-Godfrey Serial Correlation LM test for the presence of autocorrelation. The econometric software used to estimate data was E-view 8.0.

4.0 ESTIMATION RESULTS AND DISCUSSION
The outcomes of various results areinterpreted as follows:

Unit Root Test
It is used to determine the order of integration of a variable that is how many times it has to be differenced or not to become stationary. It is to check for the presence of a unit root in the variable i.e. whether the variable is stationary or not. The null hypothesis is that there is no unit root. This test is carried out using the Augmented Dickey-Fuller (ADF) technique of estimation. The rule is that if the ADF test statistic is greater than the 5 percent critical value, we accept the null hypothesis i.e. the variable is stationary but if the ADF test statistic is less than the 5 percent critical value i.e. the variable is non-stationary we reject the null hypothesis and go ahead to difference once. If the variable does not become stationary at first difference, we difference twice. However, it is expected that the variable becomes stationary at first difference. The unit root test at levels and differences are presented below in Table 1 and Table 2.

Table 1: ADF Unit Root Test at Levels

Variable	ADF Statistic	ADF Critical Value at 5% level	Remarks
RGDP	16.8188	-2.9484	Stationary
EXD	0.1776	-2.9390	Non stationary
DD	1.1062	-2.9571	Non stationary
ER	0.9996	-2.9350	Non stationary
IR	-2.3955	-2.9350	Non stationary

Source: *Author's Computation (2018) (E-views 8.0)*

From the results in Table 1, the ADF statistics for all the variables are less than their ADF critical values in absolute terms at the 5% level of significance except RGDP. Thus, we reject the null hypotheses

of unit roots at levels. All the variables except RGDP are non-stationary at their levels as indicated. Hence we proceed to test at differences in Table 2.

Table 2: ADF Unit Root Test at First Differences

Variable	ADF Statistic	ADF Critical Value at 5% level	Remarks
DRGDP	5.1525	-2.9511	Stationary
DEXD	-17.5679	-2.9390	Stationary
DDD	-8.2463	-2.9411	Stationary
DER	-5.1517	-2.9369	Stationary
DIR	-6.9709	-2.9390	Stationary

Source: *Author's Computation (E-views 8.0)   (2018)*

Table 2 showed results of the variables tested at their first differences. It revealed that the ADF statistics of all the variables are greater than their critical values in absolute terms at the 5% level. Hence, we cannot accept the null hypothesis of unit roots at first differences. Therefore, all the variables are stationary at their first differences.

Table 3: Co-integration Test
Null Hypothesis: RESIDUAL has a unit root
Exogenous: Constant
Lag Length: 5 (Automatic - based on SIC, maxlag=6)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.486434	0.0146
Test critical values:	1% level	-3.539407	
	5% level	-2.851125	
	10% level	-2.604300	

Source: *Author's Computation (E-views 8.0) (2018)*
*MacKinnon (1996) one-sided p-values.

The results of the Co-integration test using the Augmented Dickey-Fuller (ADF) technique showed that the residual is stationary at the 5% level (see appendix 2). This is because the ADF statistic of -3.4864 is greater than its critical value in absolute terms. Thus, there exists a long-run relationship between the dependent variable and the independent variables in our model. Since, all the variables are integrated of order one, that is stationary at first differences and Co-integrated, we can employ the error correction model analysis.

Table 4: Error Correction Model
Dependent Variable: D(RGDP)
Method: Least Squares
Date: 05/07/18   Time: 10:29
Sample (adjusted): 1981 2016
Included observations: 32 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.376472	0.611166	2.252206	0.0315
D(EXD)	0.783633	0.260073	3.013127	0.0004
D(DD)	-0.973869	0.211368	-4.607450	0.0001
D(ER)	-10.50436	13.79204	-0.761625	0.4517
D(IR)	-29041.19	37963.19	-0.764983	0.4497
ECM(-1)	-0.284989	0.134895	-2.112678	0.0423

R-squared	0.549538	Mean dependent var	96544.54
Adjusted R-squared	0.481286	S.D. dependent var	1398051.
S.E. of regression	1006902.	Akaike info criterion	30.62329
Sum squared resid	3.35E+13	Schwarz criterion	30.87922
Log likelihood	-591.1542	Hannan-Quinn criter.	30.71512
F-statistic	8.051627	Durbin-Watson stat	1.885554

Source: *Author's Computation (E-views 8.0) (2018)*

The adjusted coefficient of multiple determination (Adjusted R[2)] of about 0.48 revealed that 48% of the systematic variations in RGDP is explained by the independent variables. Similarly, the F-statistic (8.05) is greater than the F-critical (2.53) at the 5% level of significance. Hence, the overall fit of the model is significant indicating that there is a linear relationship between the dependent variable and the independent variables.

The error correction coefficient is approximately -0.28. It is negative and significant at 5% level of significance. This shows that any deviation of real GDP from its long-run equilibrium value would be rightly corrected by the error correction coefficient. However, the coefficient shows that the rate of reconciliation would be slow. The value of the Durbin-Watson statistic of about 1.8856 depicts that our error correction model is free from the problem of serial correlation.

Table 5: OLS Regression Results (Long-run Model)
Dependent Variable: NLRGDP
Method: Least Squares
Date: 05/07/18   Time: 10:56
Sample: 1981 2016
Included observations: 36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.856148	0.100677	48.23487	0.0000
NLEXD	-0.099607	0.021234	-4.690880	0.0001
NLDD	0.198194	0.027913	7.100519	0.0000
IR	-0.004333	0.001874	-2.311805	0.0293
ER	0.001263	0.000342	3.691835	0.0011
R-squared	0.955873	Mean dependent var		5.511527
Adjusted R-squared	0.948813	S.D. dependent var		0.192538
S.E. of regression	0.043561	Akaike info criterion		-3.278300
Sum squared resid	0.047439	Schwarz criterion		-3.044767
Log likelihood	54.17450	Hannan-Quinn criter.		-3.203591
F-statistic	135.3872	Durbin-Watson stat		1.777272
Prob(F-statistic)	0.000000			

Source:*Author's Computation (E-views 8.0)   (2018)*

$$NLRGDP= 4.86 -0.10NLED+0.20NLDD+0.001ER+0.004IR$$
$$\text{(48.235) (-4.681) (7.101) (3.692) (2.312)}$$

The coefficient of determination (R^2) which stood at 0.9559 with RGDP, implied that about 96% of the systematic variations in the dependent variable were explained by the exogenous variables (economic development), while only about 4% were unexplained hence captured by the stochastic disturbance. Consequently, after adjusting for the degree of freedom, the adjusted coefficient of determination stood

at (adjusted R-square) R^2 value of 0.9488 with RGDP, suggesting that about 95% of the systematic changes in the economic development (endogenous variable) were accounted for by the explanatory variables. The F-statistic (goodness-of-fit) stood at significant a value of 135.3872 while standard error of regression is at is at a minimal value of 0.0435, implying that overall result was statistically significant.

The Durbin Watson statistic value of 1.7773 suggested absent of autocorrelation. Thus, the estimates were impressive, reliable for structural analysis and policy directions.

Discussion of Findings

First, the result revealed that in both short-run and long-run, external debt was statistically significant. It has a positive relationship in the short run, while negative relationship in the long-run with economic development. Its implication is that external debt taken, when properly managed and utilized, there is a tendency that it could pave the way for economic development in the short-run compare to long-run period which could have negative on economic development. This finding is consistent with Udeh, etal., (2016) Mbah, Umunna and Agu (2016) Sulaiman and Azeez (2012) who stipulated that external debt is positively related to economic development.

Second, Domestic or internal debt hasa significant effect, but the negative relationship in the short run, while in the long run, it has a significant effect and positive relationship with economic development. The implication is that proper management of long-run domestic debt will have an effect on the economic development positively compare to short-run. This finding buttresses the views of Putunoi and Mutuku (2013), Igbodika, etal., (2016) and Babu, et al., (2015) indicated that domestic debt has a significanteffect and positive relationship with economic growth and development.

Third, the results showed that exchange rate is statistically insignificant and negatively related in the short run, while in the long run, it has a significant effect and positive relationship with economic development. This finding agreed with extant studies like Akpan (2008), Hausmann, Pritchett, and Rodrik (2005), Adeniranet al. (2014), Obansa, et al.,. (2013). Azeez, Kolapo and Ajayi (2012) who evidenced that positive relationship exists between exchange rate and economic development.

Finally, it was observed that interest rate is insignificant in the short-run on economic development, but statistically significant in the long run. The runs showed that interest rate has a negative relationship in both short and long run with economic development. This finding is against the views of Hansen and Seshadri (2013) and Udoka and Anyingang (2012) who argued that interest rate has negative effect and relationship on economic development.

5.0 CONCLUSION AND RECOMMENDATIONS

Debt management is a crucial strategy for the development of Nigerian economy. This cannot be overemphasized owing to the fact that debt becomes inevitable and necessary for the development of the Nigerian economic like provision of social and infrastructure developmental projects. Debts can become effective as long as borrowed funds are properly utilized for productive investment to stimulate economic development in Nigeria. However, when prudent debt management mechanism is put in place, it will eradicate misappropriation or diversion of resources to anything other than the purpose of the debt. Therefore, debt management is essential in order to ensure that various debts incurred whether external or domestic are judiciously used towards Nigerian economic development and repayment of the debt at the appropriate time taken cognisance of the exchange rate and interest rate.

Following the outcome of findings and conclusion, we, therefore, put forward the below recommendations.

The governmentshould focus more on external debts for long-run projects especially in funding infrastructure like transportation, health and powersectors. The proper arrangement should be made regarding the management of the debt such that it should escalateGovernment should

evolve a diplomatic strategy in addition to Debt Management Office (DMO) responsible in the management of debt in the country. All external debts incurred by various tiers of government should be channelled through organized debt management procedures. A benchmark should be placed by federal government on required external debt to be taken. Domestic debt should be taken for projects that fall within 1to 5 years.The government should ensure that interest rate is closely monitored before embarking on any form of debt whether external or internal. The government should ensure that agreed exchange rate is reached for any external debt. Adequate policies should be put in place so as to ensure that exchange rate does not escalate more than necessary. Further studies should improve on this study by using focused group and questionnaire administration to generate data, test reliability of the questionnaire using Cronbach Alphaand analysing with any of the following statistical tests like Z-test, Chi-square test, Analysis of Variance(ANOVA).

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