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Public Debt Services and Nigerian Economic Growth: 1970-2017

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Abstract

The study examines the public debt services and economic growth in Nigeria. Secondary data were sourced from World Bank Data Atlas for total public debt services (TPDS), consumer price index (CPI) and exchange rate (EXR) for the period of 1970 to 2017 and were subjected to Augmented Dickey Fuller Unit Root test, Johansen Co-integration and Vector Error Correction Model. The study discovered that TPDS and CPI were able to impact economic growth in Nigeria but TPDS had a negative impact while CPI showed positive impact on economic growth in Nigeria. However, EXR showed negative and statistically insignificant impact on economic growth in Nigeria. The result also showed that there was long run relationship in the study. Thus, the study concludes that public debt services influence economic growth negatively and affect economic development and enhancement adversely. Hence, the study recommends reduction in debt structures and maintenance of certain threshold for debt granting based on economic strength so as to reduce increasing debt services.

Key words: Debt services, Consumer price index, Exchange Rate, economic growth

Introduction

The diversity of the Nigerian economy as an economy is full of highly untapped productive mineral resources which have over time prompted the need for government to borrow funds over time in anticipation of tapping and enhancing economic opportunities within the economy. The result of continuous capital shortages overtime thus becomes an impending threat to harness the economic blessings and hence achievement of economic opportunities. According to Onwumere (2010), there is a problem of building capital due to low saving, low investment and low productivity, so when a country lacks the necessary resources for optimal development of investment opportunities, one of the alternatives is borrowing to finance such opportunity. However, these economic opportunities over the years made government to increase debt structures so as to maximize the productive output of the harnessed opportunities.

Malik and Siddique (2001), domestic foreign borrowings are considered as normal phenomenon because countries at the initial stages of development need capital stock. Hasan (1999) state that this debt structure enhances growth potentials and outputs; however, countries holds increased foreign debt to boost the economic growth but if it gets accumulated beyond a specific limit, it can have devastating effects upon economic growth. Hence, developing economies like Nigeria are building debt structures by getting more and more loans just to re-activate the survival of the economy which also create a major dependency on the donor that dictate the conditioning and influence major economic policies of Nigeria.

The major setbacks within the Nigerian economic position is that the debt structures have continuously increased without a commensurate increase in productivity and the

servicing of such debt has also increased alongside over time. The Nigerian debt servicing structure over the years has continued to be a major leakage in the Nigerian financial positioning over the years. Thus, the increasing public debt and its servicing are the most crucial problems that Nigeria and other developing economy of the world have been facing recently. This is a major concern in the real economic situation as many scholars beyond looking at the influence of debt structure on economic growth have also question the high cost of servicing such debt and their possible implication on economic growth within an economy.

The overcrowded debt structure of African countries became an obstacle to its development and full refund almost hypothetical (Hadhek & Mrad, 2014). Thus, debt servicing severely affects economic growth by shrinking major share of resources for macro-economic development objectives. Nigeria as a nation driven by debt structure has been caught in the trap of debt servicing which have hinder major macro-economic reforms/achievements. However, the Nigerian economic situation has been so destabilized by unbalanced and wrong economic policies, inefficiency of government and its agencies, capital flight, misappropriation of oil revenue by the political and administrative elite, corruption and deliberate debt accumulation by the political class so as to divert funds via elephant projects which have further contributed to lack of provision of basic infrastructure such as good road network, pipe born water, electricity and so on (Uma, Eboh & Obidike, 2013).

Nigeria have spent billions of naira in the past three decades now trillions of naira to service debt structure and the question that comes to mind is; how has these public debt servicing affected economic growth? To what extent has public external debt servicing impacted economic growth in real terms. These questions are necessary direction to identify the

implication of the position of a country's debt servicing on its economic condition.

Conceptual, Theoretical and Empirical Review

By review of different scholars, the origin of Nigeria's external debts dates back to 1958 when a sum of US $28 million was contracted for railway construction (Adesola, 2009). However, between 1958 and 1977, the level of foreign debt was minimal, as debt contracted during the period were the confessionals debts from bilateral and multilateral sources with longer repayment periods and lower interest rates constituting about 78.5 percent of the total debt stock. The account of Osinubi and Olaleru (2006) believed that the origin of the gloomy Nigeria debt situation was traced back to the late 1970s when there were needs to finance the widening deficit gap created by profligate spending, and it marked the beginning of the collapse of the oil boom era which was characterized by falling foreign exchange earnings and rising fiscal deficits and externalborrowing. Nigeria's foreign debt quadrupled from $9 billion in 1980 to $36 billion in 1990. These creates problems since accumulation of substantial debt, a significant proportion of public expenditure and foreign exchange earnings are absorbed by debt servicing, with heavy opportunity cost. Supporting this opinion Eduardo (1989) state that foreign and domestic debt may have a negative impact on investment through two conceptual distinctive effects: the debt overhang problem, and the credit rationing problem.

The external and domestic debt was an important, stimulator of economic growth and a way to balance the budget (Hadhek & Mrad, 2014). However, these debts that cut across Paris club, London club, Multilaterals, promissory note issued, commercial banks and others are serviced over time and the cost of servicing is a major leakage to the economic growth which affects the Nigerian economy. Adenike, Adekunle and

Abiodun (2007) noted that Nigeria has been paying approximately $ 1 billion annually to Paris club creditors and $0.8 billion to other multilateral and commercial creditors. Besides, Nigeria has never met up with US $3 billion debt services required to be paid to creditors every year (Uma, Eboh & Obidike, 2013).

The cost of servicing these debts in 1981 alone was stood at N1.03 Billion with over a three hundred percent increase by 1987 to N3.93 Billion. These special expenses for debt servicing grew to N23.82 Billion in 1990 alone showing that as debt structure overlap its cost of servicing also increase within the same period. For instance, the Nigerian external debts rose to US $33.1 billion in 1990 but decreased to US $27.5 billion in 1991 and increased steadily to US $32.6 billion at end of Dec. 1995 (Adesola, 2009). Within the same period, the cost of servicing these debts stood at N26.41 Billion and N51.06 Billion for 1991 and 1995 respectively (CBN, 2016). The astronomical increase of the cost of debt services by 2014 to 2016 stood at Nl,392.93 Billion and N2,047.42 Billion respectively. Showing that regardless of the stoppage of Paris club debt structure, continuous domestic and external debt has over time cost trillions of naira for services. In the recently approved budget of 2018, the Nigerian government set aside N2,013.83 Billion for debt services which is a leakage to building macro-economic developments.

Hence, this study looks at how public debt servicing has facilitated economic growth in Nigerian investment environment.

Analyzing the effect of debt repayment and services on the macroeconomic performance, different theoretical submissions can be identified in Inter-Generational models, Keynesian model, Neoclassical model and Ricardian model. But, this study is anchored on the Keynesian economist theories that bring forth a counter proposition by pointing out

the multiplier effects of external debt (Eisner, 1989) and thus suggest that increased external borrowing results in an increase in domestic production, which boosts investor sentiments about the future path of the economy, thus, increase in debt structures and its services are expected to increase the multiplier effects of improved infrastructure and productivity within the economy.

Different findings exist in the literature on external debt, its services and economic growth. For instance, Pattillo, Ricci and Poirson (2001) in their paper assessed the non-linear impact of external debt growth using a panel data of ninety-three (93) countries over 1969-98 employing econometric methodologies. Their finding suggested the average impact of debt becomes negative at about 160- 170 percent of export or 35-40 percent of gross domestic product (GDP).

Hadhek and Mrad (2014) also studied the effect of debt on economic growth of 19 developing countries over the period 1990-2011, through the use of a dynamic panel data model. The study concluded that external debt negatively affects economic growth of countries in our sample. Reinhart and Rogoff (2010) looking at economic growth in a time of debt, and observing economic growth and inflation at different levels of government external debt considered 44 countries. The main findings of their study were that the relationship between government debt and real GDP growth is weak for debt to GDP ratios below a threshold of 90% of GDP. For emerging economies, they face lower thresholds for external debts. When external debts reach 60% of GDP, annual growth declines by about 2%. The study also found no apparent contemporaneous correlation between inflation and public debt levels for the advanced economies as a group some counties like USA have experienced higher inflation when debt/GDP is high, unlike the emerging economies where inflation rises sharply as debt increases.

Boopen, Kesseven and Ramesh (2007) investigated the relationship between public debt and the economic performance in Mauritius over the period 1960-2004. The results from OLS regression and johansen co-integration were that debt is negatively associated with the output level of the economy in both short and long run respectively. Bi-directional causality between external debt and economic development was also reported from granger causality analyses. Moreover, there were also evidences that debt has negative impact on both private and public capital stock of the country thus confirming the debt overhang and crowding out hypotheses.

Atif, Syeda and Tahir (2014) examined the impact of foreign debt servicing on per capita income growth rate in Pakistan from 1981 to 2010. Their study using auto regression distributed lag (ARDL) co-integration discovered that foreign debt servicing adversely and significantly affected per capita growth rate of Pakistan in the short run and long run in the specific period. Supporting this finding is another study in Akram (2011) who employed Autoregressive Distributed Lag (ARDL) modelling to assess the impact of public debt on the economic growth in Pakistan. The study found out the existence of debt overhang in Pakistan and a negative and significant relationship between economic growth and public external debt. However, the crowding out effect of external debt could not be confirmed as the relationships between investment and per capita GDP to debt servicing was found to be insignificant. Domestic public debt was found to have a crowding out effect on private investments and a negative relationship with per Capita GDP. Kumar and Woo (2010) analyzed the impact of high debt on economic growth of a group of advanced and emerging countries over the period 1970-2007. Using regression model, the main results show that when the debt to GDP ratio increases by ten percentage points, the annual growth of real

GDP per capita decreased by about 0.2 percentage point per year.

However, other findings provide positive relational impact of debt structure and its services on economic growth in Abu-Baker and Hassan (2008) who analyzed the impact of external debt on economic growth in Malaysia. The empirical results using regression analysis indicated that total external debt positively affect the economic growth. In the short run, total external debt had positive effects on economic growth. It also revealed that Malaysia had not suffered from debt overhang problem.

Another study in Patenio and Tan-Curz (2007) of the relationship between external debt servicing payments and economic growth in Philippines for period 1981 to 2005 was carried out using Simple Linear Regression analysis. Results showed that economic growth was not very much affected by external debt servicing. This was probably because external debt servicing in Philippines was not yet a threat in economic growth and thus, Philippines should not fear of experiencing debt overhang in the near future.

Amaoteng and Amoako (2006) investigated on the export driven economic growth introducing debt servicing as a variable that in the export growth analysis. The findings indicated bidirectional causality between external debt servicing, economic growth and exports (from granger causality analysis). The study recommended structural adjustment programmes designed to remove economic distortions, promote exports, and encourage external debt management to realize increased growth.

In African empirical reviews on debt and its services on economic growth; for instance, were (2001) examined the structure of Kenya's external debt and its implications on economic growth using OLS technique covering the period 1970-95. In the study, the channels through which the foreign

debt affects growth included stock of external debts as a ratio of GDP, past debt accumulation and the debt service ratio. The empirical results showed that external debt has a negative impact on economic growth and private investment, confirming the existence of debt overhang problem in Kenya. However, the results also indicated that current debt inflows stimulate private investment. Also looking at Kenyan economy, Maana, Owino, and Mutai (2008) examined the effect of domestic debt on economic growth in Kenya for the period 1996-2007 using generalized method of moment's regression model. The results indicated that, lagged values of GDP, ratio of government expenditure to GDP, broad money supply, secondary school enrolment, private sector credit, ratio of debt to GDP and trade affect the level of economic growth. Increase in domestic debt resulted in increase in interest payments without crowding out private investments due to the favourable level of financial development.

Matiti (2013) used regression analysis to determine the relationship between public debt and economic growth in Kenya. The study used domestic debt and external debt as the only variables affecting economic growth. The OLS regression result showed that Public debt was found to have a negative relationship with economic growth.

Iyoha (1999) examined the impact of external debt on growth in African countries looking basically at south of the Sahara Africa from 1970 to 1994 using an econometric simulation model. He noted that the variables related to the external debt have a negative effect on investment, showing that an accumulation of outstanding debt discourages investment through two effects: the discouragement and eviction.

Faraji and Makame (2013) investigated the impact of external debt on economic growth of Tanzania for the period of 1990-2010. The study used time series data on external debt

and economic performance. The study revealed that there is significant impact of the external debt and debt service on GDP growth. Broken down, the total external debt stock has a positive effect of about 0.36939 and debt service payment has a negative effect of about 28.517. Looking at the long run relationship, the johansen co-integration test shows that there is no long run relationship between external debt and GDP.

Looking specifically at Nigerian study, Obademi (2012) using the ordinary least squares (OLS) technique in an augmented Cobb Douglas model in analyzed the impact of public debt on economic growth in Nigeria. The variables used were the external debt, domestic debt, total debt and budget deficit. He found that the impact of debt on economic growth was negative and quite significant in the long-run though in the short-run the impact was useful. He concluded that though the impact of borrowed funds on the Nigerian economy was positive in the short-run, its impact in the long-run depressed the economy as a result of inefficient debt management.

Ajayi and Oke (2012) also investigated the effect of the external debt burden on economic growth and development of Nigeria. It adopted regression analysis of OLS on secondary data sourced from CBN, Economical and Financial review, Business times, Financial Standard and relevant publication from Nigeria on variables like National Income, Debt Service Payment, External Reserves, Interest rate among others. The study discovered that external debt burden had an adverse effect on the nation income and per capital income of the nation. High level of external debt led to devaluation of the nation currency, increase in retrenchment of workers, continuous industrial strike and poor educational system. This led to the economy of Nigeria getting depressed.

Essien, Agboegbulem, Mba and Onumonu (2016) examined the impact of public sector borrowings on prices, interest rates, and output in Nigeria. It utilized a Vector

Autoregressive framework, the Granger causality test, impulse response, and variance decomposition of the various innovations to study the impact. It found that shock to external debt stock increases prime lending rate, but with a lag. However, the level of external and domestic debt over the period of this study had no significant impact on the general price level and output.

Udoka and Ogege (2012) examined the extent of public debt crisis and its consequences on economic development using data on the Nigerian economy for the period 1970 to 2010. They employed the error correction modeling framework with co-integration techniques to test the relationship between per-capita GDP and other macroeconomic variables (foreign reserve, debt stock, investment, debt service payment). The test revealed that political instability may reduce the rate of development and other independent variables were responsible for the underdevelopment of the country.

Adofu and Abula (2010) using ordinary least square regression techniques explored the relationship between domestic debt and economic growth in Nigeria. Using granger causality model, the result showed that domestic debt affected the growth of the economy negatively. Onyeiwu (2012) carried out an investigation on the relationship between domestic debt and economic growth in Nigeria using the error correction modeling approach to regression analysis. He used quarterly data between 1994 and 2008 for GDP, foreign exchange rate, credit to private sector, budget deficit and money supply. The result showed that the domestic debt holding of government was far above the healthy threshold of 35 percent of bank deposits, which resulted in a negative effect on economic growth. He recommended that government should maintain a debt- to-bank deposit ratio of below 35 percent, resort to increased use of tax revenue to finance its projects and divest itself of all projects the private sector can handle while

providing enabling environment for private sector investments such as tax holidays, subsidies, guarantees and most importantly improve infrastructure.

Osinubi and Olaleru (2006) examines how the use of budget deficits as an instrument of stabilization leads to the accumulation of external debt with the attending effects on growth in Nigeria between 1970 and 2003. By synthesizing a relationship between budget deficits and external debt the study shows the implications on economic growth of conducting a fiscal policy within the contexts of debt stabilization and debt sustainability. The results of the econometric analysis confirm the existence of the debt Laffer curve and the nonlinear effects of external debt on growth in Nigeria.

Audu (2004) investigated the impact of external debt on economic growth and public investment in Nigeria. The results of OLS regression analysis confirmed the operation of crowding out and import compression hypotheses in Nigeria. This means that debt-servicing pressure in the country has had a significant adverse effect on the growth process.

The reviewed empirical showed that there is no precise agreement on external sector debt on economic growth in the literature and the same stand goes for African countries like Kenya and Nigeria with regards to precise nature of relationship between total debt service and various macroeconomic variables. The varying results from these studies could be attributed to the methodological variations, data sources, periods under consideration and analytical tools employed.

The current study, unlike most of the studies that have only narrowed down to the examining the effect of debt stocks on economic growth (Were, 2001 and Matiti, 2013), and this facilitate the study to determine the following;

1. To investigate how servicing these accumulated public debt impact on economic growth.

2. To use both Johansen Cointegration test and Error Correction Model to determine the long run relationship and effect of the total public debt services on economic growth in Nigeria.

Hypotheses statement

Ho_1: There is no significant relationship between public external debt servicing and Nigerian economic growth.

Methodology

The study adopts the ex post facto research design since its from secondary sources particularly published annual data from IMF, Index Mundi and Knoema and subject them to statistical tools' of Augmented Dickey Fuller Unit Root Test, Johansen Cointegration Test and Vector Error Correction Model to estimate and evaluate the models. This study adopts the model of Patanio and Tan-Cruz (2007) with slight modifications (for example replacement of capital stock, labor force, and debt servicing with public domestic debt services, public foreign debt services and total public debt services);

$$GDP = a_0 + a_1CS + a_2LF + a_3DS + Ui \quad (1)$$

(Patanio & Tan-Cruz, 2007) Where GDP – Gross Domestic Product, CS - Capital Stock, LF - Labour Force, DS - Debt Servicing, A_0, a_1, a_2 and a_3- Parameters and Ui - Error term; and

The variables considered for this study are Gross Domestic Product (GDI) - dependent variable, while the independent variables are Total Public Debt Services (TPDS), Consumer Price Index (CPI) and Exchange Rate (EXR). Thus, the model of this study is stated thus,

$$GDP = a_0 + a_1TPDS + a_2CPI + a_3EXR + U_t \ldots (2)$$

Where GDP = Gross Development Product, TPDS-Total Public Debt Services, CPI-Consumer Price Index, EXR-Exchange Rate, a_0, a_1, a_2 and a_3 - are parameters and U_t -Error term

PRESENTATION AND ANALYSIS OF RESULTS

This section is divided into three subsections. The unit root test is presented first, followed by cointegration tests. This leads to the presentation of the error correction model (VECM) results.

Testing for Stationarity

The Augmented Dickey-Fuller Unit root test were done for the study and the result are shown table 1 thus;

Table 1: Stationarity result of the Augmented Dickey-Fuller Test

Variables	T-statistics	Critical Value (5%)	Prob.	Decision
CPI	-5.021730	-2.928142	0.00001 ***	Stationary 1 (2)
EXR	-3.608031	-2.926622	0.0093***	Stationary 1 (!)
TPDS	-3.677343	-2.925169	0.0076***	Stationary 1 (0) .
GDP	-4.487545	-2.926622	0.0008***	Stationary 1(1)

*Source: Researchers' compilation from E-views 10.0. Values marked with a *** represent stationary variables at 1% significance level, and ** represent stationary at 5% and * represent stationary variables at 10%.*

Table 1 shows the Augmented Dickey-Fuller results. The test has a null hypothesis of unit root. The calculated value of ADF was compared with the critical value. If the calculated value is greater than the critical, we then reject the null hypothesis that the series have unit root, thus confirming that the series are stationary. All the differenced variables were stationary at 1%, 5% and 10% significant levels except CPI and TPDS where were stationary at second difference and level respectively; hence the null hypothesis of unit root is rejected. Thus, because of the presence of diverse stationarity, the study will determine the long run relationship of the study and subject the study to vector error correction model analysis.

Tests for cointegration

Since all the variables are integrated of different order, it is very important to determine whether there exists a long-run equilibrium relationship amongst them. For the purposes of

this study cointegration examines the long run relationship between the gross domestic product and the regressors. Since all variables are non-stationary in level, the next procedure is to test for the existence of long run relationships among the variables in the model. The cointegration test using Johansen test requires the estimation of a LR equation.

***Table* 2. Johansen Co-integration Rank Test (Trace)**

Date: 11/01/18 Time: 00:00
Sample (adjusted): 1972 2017
Included observations: 46 after adjustments
Trend assumption: Linear deterministic trend
Series: GDP TPDS CPI EXR
Lags interval (in first differences): 1 to 1
Unrestricted Cointegration Rank Test (Trace) & Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob. **	Max-Eigen Statistic	0.05 Critical Value	Prob. **
None *	0.387938	60.76972	47.85613	0.0020	22.58239	27.58434	0.1920
At most 1 *	0.370271	38.18734	29.79707	0.0043	21.27341	21.13162	0.0478
At most 2 *	0.264921	16.91393	15.49471	0.0304	14.15773	14.26460	0.0320
At most 3 *	0.058158	2.756195	3.841466	0.0969	2.756195	3.841466	0.0969

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level & Max-eigenvalue test indicates no cointegration at the 0.05 level
* Denotes rejection of the hypothesis at the 0.05 level
** MacKinnon-Haug-Michelis (1999) p-values

Source: Researchers' compilation from E-views 10.0.

Table 2 shows the results of the trace test which reflect that at least three co-integrating equation exists at 5% significance level. The null hypothesis of no cointegration vectors is rejected since the trace (test) statistic of 60.76972, 38.18734, 16.91393 are greater than the 5% critical value of approximately 47.856, 29.797, 15.495 respectively. Using a similar explanation, the null hypothesis that there is at most 1 cointegration vector cannot be rejected since the test statistic of approximately 2.7562 is less than the 5% critical value of about 3.8414. For that reason, the trace statistics specified 3 co-integrating relationship at 5% significance level. The maximum Eigen value test in the same table 2 put forward that there is only 1 cointegrating relationship in the gross domestic product model. Therefore, it can be concluded that there is three significant

long run relationship between the given variables (using the trace test). Since variables can either have short or long run effects, a vector error correction model (YECM) is used to disaggregate these effects and ascertain the result of study.

Vector Error Correction Model (VECM)

The detection of a cointegration equation in the previous section means that a VECM can be used. This has led to a distinction between the long and short run impacts of variables so as to establish the extent of influence that real exchange rates have on economic growth. Using the results from the cointegration test the VECM was specified. The VECM results is presented in tables 3.

Table 3: Results of the Error Correction of Model (ECM) equation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TPDS	-2.425942	1.196204	-2.028033	0.0489
CPI	1.96E+09	1.19E+08	16.41689	0.0000
EXR	-12537271	84326087	-0.148676	0.8825
ECMK-1)	1.085698	0.096976	11.19558	0.0000
C	1.27E+11	3.15E+09	40.30361	0.0000
R-squared	0.987993	Durbin-Watson stat		1.546993
Adjusted R-squared	0.986850	F-statistic (Prob.)		864.0034(0.0000)

Source: Researchers' compilation from E-views 10.0.

The long run impact of real exchange rates on economic growth as presented in table 2 is further illustrated using coefficient equation of the VECM thus;

GDP = -2.4259422807*TPDS + 1958359531.85*CPI - 12537271.2949*EXR + 1.08569750461*ECM1(-1) + 126913275994

Table 2 shows that three of the four variables have long run relationship alongside the GDP. The results of the table 3 suggest that a unit increase in TPDS is a depreciation of the Nigerian funds for further re-investment and therefore reduces economic growth in the long run by approximately 2.426. This shows that despite the fact that a negative significant

relationship exists in the short run as depicted by table 3 t-statistics for TDPS at -2.028033 with probability value of 0.0489 which is less than the significance level of 5% prove that TPDS have affected the economic growth negatively both in the short run and long run. In the long run the results counter the Keynesian economist theories of multiplier effects of external debt and its services (Eisner, 1989) that suggest that increased external borrowing results in an increase in domestic production, which boosts investor sentiments about the future path of the economy and economic growth at large. However, the presence of long run relationship signifies that TPDS play significant role on economic activities but where nevertheless negative in nature and represented and stressed by the negative t-statistics result. Continuous increase in the cost of debt services over time has further depreciated the required increases in the possible anticipated output of the domestic infrastructural developments, production in general and economic growth at large.

In the short run a unit increase in CPI increases economic growth by approximately 1.96. Hence, an increase in cost of items (CPI) in the long run continue to attracts foreign direct investment especially portfolio investments which improves the investment returns and thus increasing economic growth. The significant relationship at 16.416 for T-statistics and prob. value of 0.0000 at 5% significance level further stressed the fact that investor take advantage of the ever-increasing high cost of living. However, this increase is a significant threat to economic conditions which further worsen the position imposed by increasing debt services within the economy.

A unit increase in EXR decreases economic growth in the short run by approximately 12537271.295. Investment in public and private infrastructure like roads, plant and equipment contrast as a result of fallen value of the local

currency to the foreign currency thereby inflicting a much higher local currency denomination to acquire foreign facilities for both investment enhancement, road construction, plant and equipment acquisition within the country thus affecting the country's production capacities and economic growth at large.

Summarily, TPDS is statistically negative significant in explaining economic growth in Nigeria in the short run as seen by absolute t-values of table 3. The other control variables in CPI positively and statistically explain economic growth however, EXR negative and insignificantly explain economic growth.

CONCLUSION AND RECOMMENDATION

This study examined public debt services and economic growth in Nigeria. We specifically investigated the impact of this public debt services on economic growth as well as the impact of other control variables like consumer price index and exchange rate on economic growth. The results from the empirical findings revealed that, public debt services have a negative and significant impact on economic growth in Nigeria's gross domestic product (GDP). In the same vein, while public debt services showed negative and significant impact on economic growth, control variables like EXR also showed negative but insignificant impact on economic growth while CPI impacted both positively and significantly on economic growth within the period under consideration. It is therefore important to note that, even though there are diverse benefits and threats from debt services on economic opportunities; however, the Nigerian scenario has experience more economic setbacks from debt services since 1970 till 2017 the end period of the study. The exchange rate further showed how the domestic currency has lost value of trade in the international market and its stock value dragging behind other currency in the African continents

and the world at large. However, this position of debt services can be well improved when the Nigerian debt position is consciously reduced as previous borrowed funds are not utilized to full development capacity and when they are done, the products are barely maintained as government upon government ignore total maintenance of previous debt funded projects to engage in new projects. International community should also device new policy measures of ensuring countries don't contract debt structure beyond a certain threshold based on economic strength so as so stop unwarranted debt services that lead a country into slavery by proxy.

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