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PUBLIC DEBT AND ITS EFFECT ON THE NIGERIAN ECONOMY

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ABSTRACT

The study examined the impact of public debt and its effect on the Nigerian economy for the period of 1985-2020 (36years). This was done respect of measures of public debt, namely; Domestic Debt Stock (DDS), External Debt Stock (EXTDS), External Debt Servicing (EXTDSG) and Total Public Debt (TPD) and how they affect Nigerian economy {proxy with Real Gross Domestic Product (RGDP)}. The method of data collection used in this study is the secondary source of data (time series data), from the CBN Annual Report and Debt Management Office Annual Reports. The data set was described using descriptive statistics and the unit root test was conducted to ascertain if the data are stationary in order to have accurate regression result. The correlation analysis will be use to ascertain the co-movement of the independent variables in relation to the dependent variable while the Multiple Regression analysis were employed with the aid of E-VIEW version 9.0 for the purpose of testing the research hypotheses raised. The finding revealed that EXTDSG have positive and significant effect on RGDP while DDS, EXTDS and TPD has negative and insignificant effect on RGDP proxied for Nigerian economy. Hence, the study concluded that public debt does not exerts significant effect on the Nigerian economy. This study recommends that since foreign debt impacted negatively on Nigerian economy, government should discontinue borrowing to finance the national budget, in a bid to achieve key macro-economic goals such

as price stability, improvement in standard of living, provision of social and economic amenities amongst others, which will bring about economic growth and development in Nigeria.

Keywords: Domestic Debt Stock, External Debt Stock, Debt Servicing and Real Gross Domestic Product.

INTRODUCTION

Introduction: Background to the Study

All over the world, the issue of public debt proliferation suffered by numerous developing countries has attracted global attention; this experience which is occasioned by the fall in oil prices, exchange rate volatility, increasing interest rate etc. has exerted a negative effect on the economy of developing economies across the globe especially Nigeria (Favour, Ideniyi, Oge and Charity, 2017). Debt or borrowings have been described as an important instrument of fiscal policy available to government to fund the development of a nation. Debt is employed in causing the settlement of expenditures that will ultimately increase productivity and improve the growth of the economy (Muhammad, Ruhaini, Nathan and Arshad, 2017).

Although, studies have ascertained a negative impact of public debt usually a particular level on the growth of most developing economies (Panizza and Presbitero, 2012); Reinhart and Rogoff, 2010) as cited in Efanga, Etim and Jeremiah (2020). It has been that budget deficits demonstrate that government expenditure is high relative to its revenue; this gap has been identified to be filled with public debt. Public debt which includes both internal (domestic) and external debts is considered when the revenue realized by the governable is insufficient for its projected expenditures (Efanga, et al, 2020).

Public debt which is also referred to as national debt owed by the government or the aggregate of borrowings of all government units such the federal, state and local government (Idenyi, Igberi and Anoke, 2016). Public debt is described as the aggregate of borrowings acquired by government bodies of a country; this includes funds owned to private organizations, public entities, foreign government etc. In the discourse of public debt, future pension payments, government liabilities and good and services received by government on credit are all considered. Idenyi, Igberi and Anoke (2016) affirmed that public debt forms one of the numerous approaches of financing government expenditures; although governments can instruct the Central Bank to produce and release funds to it so as to avoid the interest payment attached to government debts, this method will unarguably control interest cost but will not get rid of the debt. In fact, the authors further maintained that the ultimate result of such action is hyperinflation. Also, government can also increase tax in its bid to service its debt (Idenyi, Igberi and Anoke, 2016).

Public debt may be grouped either in terms of term or area sourced from. In terms of term, public debt may be classified in to long-term debt when the debt is expected to last for a longer period of time and short-term debt if debt is designed to last for one or two years only. Also, it can be classified in terms of source; that is external debt and domestic debt (Ajayi and Edewusi, 2020). External debt refers to any financial resources which government and organizations are using that are borrowed from outside the shores of Nigeria. Regardless of where it is borrowed from, it has both advantages and disadvantages; therefore any government or institution that has the intention of borrowing from these international institutions should consider the merits and demerits associated with it before set out to secure the fund (Ehiedu, Odita & Kifordu, 2020). Domestic debt therefore is defined as debt that

government borrowed within the country, it involves the same currency. Therefore all the amount of money that government owes internally such as Treasury Bills, Treasury Certificates, and Federal Government Development Stock, Ways and Means Advances and Treasury Bonds are all regarded and grouped as domestic debt (Ajayi, et al, 2020)

Debt management office (DMO) was established in 2000, charged with the responsibility to coordinate the management of debt for all government levels in the country. While the Federal government guaranteed the external borrowings of the state governments, the domestic borrowings of the states require analysis and confirmation by the Federal Government in line with the guidelines and clear criteria, which illustrates that the states can repay the debt based on their Federation Allocation and internally generated revenue (Sunday, Ngozi, Michael & Ogochukwu, 2016). However, with the debt relief of 2005, one may have expected that the era of rapid public debt growth was over but the reverse was the case, as the public debt continued to increase unabated. It is against this backdrop, that this research investigates the impact of public debt and its effects on the Nigerian economy.

It has also been argued that there is nothing intrinsically wrong in obtaining loan whether foreign or domestic, provided such funds are invested appropriately in creating wealth and improving the quality of lives of the people. In the same vein, opinion stands divided as per the actual role of public borrowing in Nigeria (Ehiedu, Onuorah & Owonye, 2022). While some individuals see it as beneficial, others are of the view that public debt has failed to produce the desired economic benefits, being characterized by strange terms, occasioning high interest payments and unpalatable debts service agreements. Coupled with this is the perceived high incidence of corruption among government officials who allegedly connive with some of the lender agencies to defraud Nigeria of billions of naira. Despite the debt relief of US$18 billion received from the Paris Club in 2005 the situation remains largely the same (Ehiedu & Odita, 2014).

The consistent upsurge in Nigerian's domestic and external debt profile without an obvious growth in its capacity usage have over time caused the frequent quest for debt scheduling and cancellation expired by Nigeria and several other developing countries across the globe (World Bank, 2002) cited in (Efanga, et al, 2020). Following the issues created by endogenous factors stemming from domestic debt which includes extra-tax burden, deflection of the society's limited capital form the productive private sector to the unproductive public sector and the economic exogenous factors such as exchange rate and interest rate particularly couple with the oil price drop which led Nigeria into its first recession in 2004 and also intensified its debt stock cause the need for debt relief which was initiated in 2005 (Nwankwo, 2010) cited in (Efanga, et al, 2020). However, despite the cancellation of Nigeria's membership in Paris and London Club in 2006, the country still employed deficit financing especially in 2009 and 2010 when it provided debt instruments of about N524billion and N867billion respectively, this attempt was clearly awkward as it occasioned the payment of an increased interest rate of $42billion owed to the Paris Club (Nwankwo, 2010) cited in (Efanga, et al, 2020).

The impact that public debts have in enhancing economic growth has overtime been researched by several scholars, but recently it has undergone a very notable revival probably prompted by the substantial weakening of public finances in different economies, that may be attributed to the 2008 financial crisis (Alejandro & Ileana, 2017). Several empirical documentations exist on the dichotomy in favour of and against public borrowings as a way of promoting and enhancing economic development in an economy. Some of this literature

include; Elom-Obed, Odo, Elom-Obed and Anoke (2017) and Eze, Nweke, and Atuma (2019), etc. it important to note that public debt is bad when it becomes chronic and burdensome for the government to repay; however, countries cannot avoid it since it is capable of providing key macro-economic goals which will improve the economic growth. In light of this, public debt was described as a necessary evil. This implies that borrowing remains good until it reached the point in which it makes the economy worse off. It is against this background this study investigates public debts (measures with domestic debt, external debt, total debt and debt servicing) in relation to Nigeria economy proxied with real gross domestic product.

REVIEW OF RELATED LITERATURE

Conceptual Framework

Public Debt

Public debt also referred to as government debt or external debt is conceptualized as the aggregate debts owed by a certain country to individuals, corporations and countries within the country or abroad. Government debts typify all forms of government borrowings at all levels of government (Christabel, 2013) cited in (Efanga, et al, 2020). Public debt forms part of the finance approach adopted by governments all over the world, although this approach is often resorted to when all measures have been exhausted, in fact the measure is considered favorable relative to other measures which includes the creation of money and the sale of national assets (Martin, 2009) cited in (Efanga, et al, 2020).

Notwithstanding, it has been observed that an increased level of external debt impacts negatively on the trade ability and economic prosperity of most nations. Also, debt overhangs influences economic improvement and the effectiveness of monetary policies, export growth and reduces the severity of trade policies thereby enhancing the friendliness of the market and by implication increasing trade openness. Despite this, debt if not adequately utilized reduces the level of economics development. He further maintained that debt services ceases the resources required for socioeconomic development. Ojo (2009) cited in (Efanga, et al, 2020), averred that the increased debt incurred by Nigeria is undoubtedly one of the issues that occasioned the SAP implemented in 1986 to create a sustainable economic growth.

Debts have been categorized into two broad forms such as the external debt which is contracted outside the country and domestic debt which is described as debts raised from individual and corporations within the country. Furthermore, the reproductive debt and dead weight debt are other classification of debts. The former is referred to as a loan raised to cause the acquisition of assets that is urgently required for productive activities e.g. borrowing for electricity, refineries, acquisition of factors etc. Meanwhile, the latter - deadweight debt is referred to as debts contracted to execute unproductive activities e.g. debt undertaken to promote war or finance current expenses (Said and Yusuf, 2018).

Said and Yusuf (2018) asserted that public debt is an effective measure to enhance economic growth especially when it is adequately used in developing national assets which could provide job opportunities. Although public debt if mismanaged or unproductively utilized, this triggers numerous economic adversities; this premise the idea that debt should be resorted to when its urgent and when measures for its adequate utility and management is in place.

Economic Growth

Economic growth has over time been regarded as an all-important goal of economic policy with a robust study occasioned to clarify how this aforesaid goal can attained (Fadare, 2010) cited in (Efanga, et al, 2020). Economic growth has attracted the concern of scholars.

Khorravi and Karimi (2010) cited in (Efanga, et al, 2020), affirmed that classical studies determined that economic growth is grossly dependent on labour and capital as factors of production. Economic growth describes the increase of the country's national output or gross domestic product. It also represents an increase in the economic capacity to produce goods and services relative to their output in the previous years ((Efanga, et al, 2020). A growth is caused in the economic whenever a unit of production is successfully inputted into the economic system. Hence we say that economic growth describes the amount of goods and services created, with less concern about how the products or services are produced (Efanga, et al, 2020). Economic growth can be estimated in nominal terms e.g. inflation or adjusted inflation by the percentage rate of increased in national output (GDP). Notwithstanding, economic growth estimates growth in monetary terms and considers no other areas of development (Efanga, et al, 2020).

Theoretical Framework

The Ricardo Theory of Public Debt

The theory was postulated by Ricardo in 1819. The author maintained that the expected and unexpected expenditures of government basically include payments approved to maintain economic balance despite the ineffectiveness of most labourers in the economy. In a letter sent to McCulloch by Ricardo in 1986, he asserted that public expenditure was an unproductive economic activity implemented by the state. Following this identified fiscal gap, Ricardo's theory was focused on the increasing burden stemming from the society, which is a product of unproductive public expenditures (Precious, 2015) cited in Efanga, Etim and Jeremiah (2020).

The Riacrdo's theory of public debt suggests that financing public expenditure could be productively attained by sourcing funds from sectors and communities with excess economic resources so as to reduce inequality. He stated that the reason for this is because the prioritization of a certain sector for the settlement of public expenditure does not impact positively on the growth of the economy but rather it impoverishes the state despite large amount of public debts and taxes raised (Ricardo, 1819) cited in Efanga, et al (2020). In a similar way, the author argued that the payment of interest of debt extorts significant amount of wealth from the society to a different economy thereby impoverishing the state. This according to Okoye, Modebe and Evbuomwan (2013) cited in Efanga, et al (2020), necessitates the need for countries to contract productive debts as improves economic growth.

Empirical Review

Efanga, Etim and Jeremiah (2020) ascertain the impact of public debt on economic development in Nigeria from 1981 to 2018. Ex – post facto research design was employed; data used for analysis were elicited from Central Bank Statistical Bulletin of 2018 and World Bank Database: World Development Indicator 2018. Gross fixed capital formation was employed as the dependent variable, while foreign debt and domestic debt were utilized as proxy for public debt and exchange rate was employed as a control variable. This study employed Auto Regressive Distributed Lag (ARDL) Model to analyze data, other diagnostic tests such as; test of Normality, Auto correlation test, Heteroskedasticity test and Breusch-Godfrey Serial Correlation LM test were also carried out and they confirmed the validity and reliability of the model employed; the inferential results suggested that public debt had positive and significant impact on economic development in Nigeria.

Ajayi and Edewusi (2020) examined the effect of public debt on economic growth of Nigeria. Specifically, the study determined the impact of domestic debt on the economic growth of Nigeria; assessed the effect of external debt on the economic growth of Nigeria and analyzed

the relationship public debt and the economic growth of Nigeria. Secondary time series data spanning thirty-seven years (1982-2018) was gathered in the study. Data gathered in the study was estimated using descriptive statistics, unit root test, Johansen co-integration test and vector error correction model. Discoveries from the study suggests that external debt exerts a negative long run and short run effect on economic growth of Nigeria and domestic debt was ascertained to exert positive long run and short run effect on economic growth of Nigeria.

Eze, Nweke, and Atuma (2019) conducted a study on Public Debts and Nigeria's Economic Growth. The broad objective of this study was to analyze the impact of public debts on economic growth in Nigeria for the period 1981-2017. The study adopts ex-post facto research design. Multiple regression analysis was utilized in the study in which the ARDL model and Chow Breakpoint test were the methods used in the analysis. Data obtained from the Central Bank of Nigeria (CBN) statistical bulletin, volume 28, 2017 on gross domestic product growth (GDP), public investment (LPUINV), external debt (LEXD), domestic debt (LDDs), total public debt (LTPUBT), government expenditure (LGEX), national savings (LNS), consumer price index (CPI) and interest rate (INR) were analyzed in the study. The results revealed that external debt has a negative and significant impact on GDP while domestic debt has a negative and insignificant effect on GDP. Similarly, government expenditure has a positive and significant impact on GDP, while national savings and consumer price index have a positive and insignificant effect on LGDP. The results also showed that external debt has a negative and significant impact on LPUINV, while LDD has a positive and insignificant effect on LPUINV. More so, the results indicated no evidence of significant structural break between the variables.

Said and Yusuf (2018) examined public debt and economic growth in Tanzania. The quantitative research approach was adopted as secondary time series data spanning forty-five years was collated. Co-integration and Vector Error Correction Mechanism (VECM) Approach were used in analyzing data collated in the study. The VECM estimate showed that there is a negative relationship between public debt and economic growth in Tanzania over the study period. In addition, granger causality test revealed that there is no causal relationship between public debt and economic growth. Premise on these findings, the study suggested Government and policy makers should stop the accumulation of external debt stock overtime and prevent concealing of the motive behind external debt; external debts should be used only for productive investment of highest priorities that would help in yielding returns for economic reasons (productive purposes) and not for social or political reasons.

Elom-Obed, Odo, Elom-Obed and Anoke (2017) empirically analyzed the relationship between public debt and economic growth in Nigeria from 1980-2015. The study adopted Vector Error Correction Model (VECM) approach of econometric data analysis. The variables used in the study include real gross domestic product (RGDP), foreign debt, domestic debt and domestic private savings. The results of the study indicated that: (i) External debt have significant negative impact on economic growth within the period under study. (ii) Domestic debt (DMD) has significant negative relationship with economic growth within the period under consideration. (iii) External debt and domestic debt granger cause RGDP in Nigeria with causality running from external debt and domestic debt to RGDP.

Mwaniki (2016) evaluated the effect of public debt on the gross domestic product in Kenya. The study specifically analyzed the effect of external debt on GDP; assessed the impact of advances from commercial banks on GDP; estimated the effect of overdraft from central bank of Kenya on GDP and evaluated the effect of government securities on GDP. The study

employed the OLS regression and causal research design and secondary data spanning twelve years (2003-2015) was gathered. Data amassed in the study were analyzed inferentially. Findings resulting from the analyses revealed that bank loans, external debt and government securities have a significant relationship with gross domestic product of Kenya.

RESEARCH METHODOLOGY

Introduction

The research design for this study was based on the ex-post facto research design. The method of data collection used in this study is the secondary source of data collection. This source is from the aggregate secondary data from CBN Annual Report and Debt Management Office Annual Reports for the period 1986-2021 (36years).

Techniques of Data Analysis

The statistical technique of data analysis was adopted in this study. The study will first conduct the descriptive statistics, followed by a unit root test for the time series data in order to ascertain if they are stationary or not. After which, and the correlation analysis was use determine the nature of relationship between the independent {Public Debt, namely; Domestic Debt Stock (DDS), External Debt Stock (EXTDS), External Debt Servicing (EXTDSG) and Total Public Debt (TPD)} and dependent (Real Gross Domestic Product (RGDP) proxy for the Nigerian economy) variables. The multiple regression analysis which was used through the Regression model, using the computer statistical software, E-VIEWs 9.0. This is the appropriate measures taken to analyze data as regards the study in question.

Model Specification

The model of this study is specified as follows;

RGDP = f(DDS, EXTDS, EXTDSG, TPD)

$$\mathbf{RGDP = \beta_0 + \beta_1 DDS + \beta_2 EXTDS + \beta_3 EXTDSG + \beta_4 TPD + U}$$

Due to the nature of data, they were subjected to natural logarithm, as depicted below;

$$\mathbf{Log\ RGDP = \beta_0 + \beta_1 LogDDS + \beta_2 Log\ EXTDS + \beta_3 Log\ EXTDSG + \beta_4 Log\ TPD + U}$$

Where:

RGDP=Real Gross Domestic Product, **DDS**=Domestic Debt Stock, **EXTDS** = External Debt Stock, **EXTDSG**=External Debt Servicing, **TPD**=Total Public Debt, U = Disturbance Term (other variable not mentions in the model), β_0 = Constant Term and the a priori expectation is $\beta1, \beta2, \beta3, \beta4 > 0$.

RESULT AND DISCUSSIONS

Table 1

Descriptive Statistics

	LOGRGDP	LOGDDS	LOGEXTDS	LOGEXTDSG	LOGTPD
Mean	7.322314	4.650948	4.645860	2.830794	5.020907
Median	7.289194	4.509835	4.810482	2.315319	4.991493
Maximum	7.697718	6.136824	6.689333	5.999188	6.796616
Minimum	7.099801	3.183529	2.642366	1.662758	3.343999
Std. Dev.	0.162502	0.941538	1.400222	1.473254	1.145260
Skewness	0.883631	0.140615	-0.037374	1.532290	0.088732
Kurtosis	2.731582	1.702926	1.500222	3.442073	1.565320
Jarque-Bera	4.792898	2.642235	3.382381	14.91349	3.134701
Probability	0.091041	0.046837	0.014300	0.000578	0.008597
Sum	263.6033	167.4341	167.2509	101.9086	180.7527
Sum Sq. Dev.	0.924242	31.02725	68.62181	75.96669	45.90672
Observations	36	36	36	36	36

Source: EVIEW, 9.0 Outputs, 2022.

Table 1 above is the presentation of the descriptive statistics. The mean value for the RGDP recorded a mean value of 7.3223 with a standard deviation of 0.1625. Also, DDS, recorded a mean of 4.6509 and standard deviation of 0.9415, EXTDS, recorded that a mean of 4.6459 with a standard deviation of 1.4002, EXTDSG, recorded that a mean of 2.8303 with a standard deviation of 1.4733 and PD recorded an average value of 5.0209 with a standard deviation of 1.1453. Since the standard deviations for all the variables are lesser than respectively means, it shows that the data are not widely dispersed.

The normal distribution has a kurtosis of three, which indicates that the distribution has neither fat nor thin tails. Consequently, if an observed distribution has a kurtosis greater than three, the distribution has heavy tails when compared to the normal distribution. Since all the kurtosis coefficients in Table 1 are lesser than 3, this shows that GDP, DDDS, EXTDS, EXTDSG and TPD have thin tails when compared to the normal distribution.

Multicollinearity Test

Since the data for the study are annual time series, the multicollinearity test was conducted to ascertain if the data contained multicollinearity, this is presented in table 2 below;

Table 2

Variance Inflation Factors Multicollinearity Test

Variance Inflation Factors

Date: 11/23/21 Time: 04:53
Sample: 1985 2020
Included observations: 36

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.112232	163.1767	NA
LOGDDS	0.137412	4493.806	7.211886
LOGEXTDS	0.088262	3014.378	9.446083
LOGEXTDSG	0.000799	11.75813	2.450894
LOGTPD	0.403979	15555.84	8.239836

Source: EVIEW, 9.0 Outputs, 2022.

Multicollinearity occurs in a data set when two or more independent variables in multiple regression models are highly correlated. In order to ensure that the results of this study are valid, the variance inflation factor (VIF) computed as shown in Table 2. Furthermore, the Centered Variance Inflation Factor (CVIF) statistics for all the independent variables consistently lies between 7.2119, 9.4461, 2.4509 and 8.2398 for DDS, EXTDS, EXTDSG and TPD respectively. This indicates the absence of multicollinearity problems among the variables under investigation because the cut off value of VIF is 10. Values of VIF that exceed 10 are often regarded as indicating multicollinearity.

Data Validity Test

Since the data are time series data, spanning for 1985-2020(36years), the validity test was carried out using the LM test, Heteroskedasticity Test and Ramsey RESET Test in order to ascertain the validity of the data for the analysis. This is presented in Table 3 below;

Table 3

Data Validity Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	25.56167	Prob. F(2,29)	0.5603
Obs*R-squared	28.63570	Prob. Chi-Square(2)	0.6071

Source: E-VIEW, 9.0 Outputs, 2022.

In line with the rule, the Breusch-Godfrey Serial Correlation LM Test table above shows that the probability values of 0.56 and approximately 0.20 for both F-statistic and Obs*R-squared respectively are statistically insignificant at 5% level of significance. Hence, the null hypothesis that there is serial correlation in the model is rejected. Thus, the model is said to be free from serial correlation.

Table 4

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	24.58878	Prob. F(4,31)	0.6541
Obs*R-squared	21.69584	Prob. Chi-Square(4)	0.4383
Scaled explained SS	23.87555	Prob. Chi-Square(4)	0.1521

Source: E-VIEW, 9.0 Outputs, 2021.

The Heteroskedasticity test above suggests that the variables are free from the problem of Heteroskedasticity since the p-values of F-stat. and Obs*R-squared of 0.6541 and 0.4383 respectively are > 5% significance level. This outcome is further strengthened by the p-value of approximately 0.80 for the Scaled explained SS which also suggest the absence of Heteroskedasticity.

Table 5

Ramsey RESET Test

Equation: UNTITLED
Specification: LOGRGDP C LOGDDS LOGEXTDS LOGEXTDSG LOGTPD
Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	28.99502	30	0.4669
F-statistic	84.07111	(11, 30)	0.7869
Likelihood ratio	88.93629	1	0.9529

Source: E-VIEW, 9.0 Outputs, 2021

From the Table 5 above, it confirms that the Durbin Watson stat that our data has no traits of autocorrelation. Indicates that the model is homoskendastic since the probability values of three parameters are greater than 0.05 level of significance. Ramsey test result reveals that our model is correctly specified and is stable.

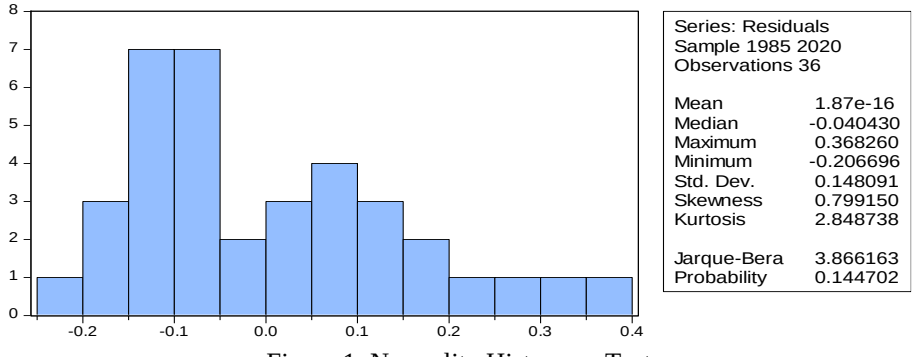

Figure 1: Normality Histogram Test

Source: E-VIEW 9.0 Output, 2022.

This test is conducted to ensure that the data employed in this study are normally distributed. Observing from the normality diagram in the figure above, as well as the Jarque-Bera value of 3.8662 and its corresponding p-value of 14% which is >5% significant level confirms that the data are normally distributed.

Augmented Dickey-Fuller (ADF) Unit Root Test

Testing for the existence of unit roots is a principal concern in the study of time series models and co-integration. The presence of a unit root implies that the time-series data under

investigation is non-stationary; while the absence of a unit root shows that the stochastic process is stationary. The unit root test was conducted using the ADF Unit root test as presented in table 6 below:

Table 6

Augmented Dickey-Fuller Unit Root Test

Test Variables	**ADF Test Statistic Value**	**Mackinnon Critical Value @ 5%**	**Order of Integration**	**P-Value**	**Decision**
RGDP	-5.974869	-2.951125	1(1)	0.0000	**Stationary**
DDS	-5.651181	-2.951125	1(1)	0.0000	**Stationary**
EXTDS	-4.455578	-2.951125	1(1)	0.0012	**Stationary**
EXTDSG	-5.872015	-2.951125	1(1)	0.0000	**Stationary**
RGDP	-5.097868	-2.951125	1(1)	0.0002	**Stationary**

Source: E-VIEW, 9.0 Outputs, 2022

The summary of the ADF unit root test output in table 6, above revealed that all the variables under investigation i.e. RGDP, DDS, EXTDS, EXTDSG and TPD contain unit root test at their first difference 1(1). Evidence of this could be seen from the value of their respective ADF statistics which is more than the critical value at 5%. They all attained stationarity at first difference i.e. at order one. Since the variables are all integrated at order one, we may proceed with Johansen cointegration test.

Johansen Cointegration Cointegration Test

Table 7

Summary of Johansen Cointegration Test Output

Date: 11/23/21 Time: 05:21
Sample (adjusted): 1987 2020
Included observations: 34 after adjustments
Trend assumption: Linear deterministic trend
Series: LOGRGDP LOGDDS LOGEXTDS LOGEXTDSG LOGTPD

Hypothesized		**Trace**	**0.05**		**Max-Eigen**	**0.05 Critical**	
No. of CE(s)	Eigenvalue	Statistic	**Critical Value**	Prob.**	Statistic	**Value**	**Prob.****
None *	0.515442	70.50251	69.81889	0.0353	34.63360	33.87687	0.0212
At most 1 *	0.424849	50.86891	47.85613	0.0129	28.80619	27.58434	0.0296
At most 2 *	0.270404	32.06272	29.79707	0.0250	30.71897	21.13162	0.0053
At most 3	0.163130	31.34375	15.49471	0.0002	26.54927	14.26460	0.0042
At most 4	0.144059	5.288823	3.841466	0.0215	5.288823	3.841466	0.0215

Researcher's Computation Based E-views 9.0 Output, 2022.

Table 7 above revealed that the result of the multivariate cointegration test by Johansen and Juselius cointegration technique reveal that both the trace statistic and the Maximum Eigenvalue statistic shows evidence of two cointegration relationship (at None and at most 1), where the values of the trace statistic and the Maximum Eigenvalue statistic is greater than their respective critical values at 5% level of significance level. This result conforms to the existence of a stable long-run relationship between financial performances of deposit money banks.

Table 8

Correlation Matrix

	LOGRGDP	LOGDDS	LOGEXTDS	LOGEXTDSG	LOGTPD
LOGRGDP	1.000000				
LOGDDS	0.063190	1.000000			
LOGEXTDS	0.065397	0.974898	1.000000		
LOGEXTDSG	0.278241	0.755444	0.736528	1.000000	
LOGTPD	0.069281	0.991836	0.994077	0.754771	1.000000

Source: EVIEW, 9.0 Outputs, 2021.

The correlation test is presented in Table 8 and it shows the absence of multi-co linearity among the variables since the correlation values are less than 0.7. Furthermore, the result shows the explanatory variables namely; DDS, EXTDS, EXTDSG and TPD has positive strong correlation with RGDP in Nigeria.

Table 9

Multiple Regression Analysis

Dependent Variable: LOGRGDP
Method: Least Squares
Date: 11/23/21 Time: 04:52
Sample: 1985 2020
Included observations: 36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.574767	0.335011	22.61050	0.0000
LOGDDS	-0.180500	0.370691	-0.486928	0.6297
LOGEXTDS	-0.030239	0.297088	-0.101785	0.9196
LOGEXTDSG	0.066472	0.028264	2.351841	0.0252
LOGTPD	-0.051462	0.635593	-0.080966	0.9360

R-squared	0.869502	Mean dependent var	7.322314
Adjusted R-squared	0.762341	S.D. dependent var	0.162502
S.E. of regression	0.157355	Akaike info criterion	-0.732375
Sum squared resid	0.767581	Schwarz criterion	-0.512442
Log likelihood	18.18276	Hannan-Quinn criter.	-0.655613
F-statistic	1.581749	Durbin-Watson stat	1.574838
Prob(F-statistic)	0.203859		

Source: EVIEW, 9.0 Outputs, 2022.

The multiple regression results in Table 9 above, the coefficient of DDS is -0.1805 with a t-value of -0.4869 and an associated p-value (sig. value) is 0.6297. This suggests that DDS have a negative insignificant effect on RGDP. This relationship is insignificant given the fact that the p-value of 0.6297 is greater than 0.05 (5%) level significance. The coefficient of DDS is -0.1805, which implies that DDS has a negative trend with RGDP. One percent (1%) movement in DDS would lead to 18.05% decrease in RGDP in Nigeria. This finding is in line with the findings of Eze, Nweke, and Atuma (2019) but contradicts the findings of Efanga, Etim and Jeremiah (2020) and Ajayi and Edewusi (2020).

Also, the multiple regression results in Table 9 above, the coefficient of EXTDS are -0.0302 with a t-value of -0.1018 and an associated p-value (sig. value) is 0.9196. This suggests that EXTDS have a negative insignificant effect on RGDP. This relationship is significant given the fact that the p-value of 0.9196 is greater than 0.05 (5%) level significance. The coefficient of EXTDS is -0.0302, which implies that EXTDS has a negative trend with RGDP. One percent (1%) movement in EXTDS would lead to 3.02% decreases in RGDP in Nigeria. This finding is in line with the findings of Ajayi and Edewusi (2020) and Eze, Nweke, and Atuma (2019) but contradicts the findings of Efanga, Etim and Jeremiah (2020)

More also, the multiple regression results in Table 9 above, the coefficient of EXTDSG are 0.0665 with a t-value of 2.3518 and an associated p-value (sig. value) is 0.0252. This suggests that EXTDSG have a positive significant effect on RGDP. This relationship is significant given the fact that the p-value of 0.0252 is lesser than 0.05 (5%) level significance. The coefficient of EXTDSG is 0.0665, which implies that EXTDSG has a positive trend with RGDP. One percent (1%) movement in EXTDSG would lead to 6.65% increases in RGDP in Nigeria. This finding is in line with the findings of Efanga, Etim and Jeremiah (2020) but contradicts the findings of Eze, Nweke, and Atuma (2019).

Finally, the multiple regression results in Table 9 above, the coefficient of TPD are -0.0515 with a t-value of -0.0810 and an associated p-value (sig. value) is 0.9360. This suggests that TPD have a negative insignificant effect on RGDP. This relationship is insignificant given the fact that the p-value of 0.9360 is greater than 0.05 (5%) level significance. The coefficient of TPD is -0.0515, which implies that TPD has a negative trend with RGDP. One percent (1%) movement in TPD would lead to 5.15% decreases in RGDP in Nigeria. This finding is in line with the findings of Eze, Nweke, and Atuma (2019) but contradicts the findings of Efanga, Etim and Jeremiah (2020).

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

Based on the analysis, the finding revealed that EXTDSG have positive and significant effect on RGDP while DDS, EXTDS and TPD has negative and insignificant effect on RGDP proxied for Nigerian economy.

Conclusion

The study examined the impact of public debt and its effect on the Nigerian economy for the period of 1985-2020 (36years). This was done respect of measures of public debt, namely; DDS, EXTDS, EXTDSG and TPD and how they affect Nigerian economy {proxy with RGDP}. The method of data collection used in this study is the secondary source of data (time series data), from the CBN Annual Report and Debt Management Office Annual Reports. The data set was described using descriptive statistics and the unit root test was conducted to ascertain if the data are stationary in order to have accurate regression result. The correlation analysis will be use to ascertain the co-movement of the independent variables in relation to the dependent variable while the Multiple Regression analysis were employed with the aid of E-VIEW version 9.0 for the purpose of testing the research hypotheses raised. The finding revealed that EXTDSG have positive and significant effect on RGDP while DDS, EXTDS and TPD has negative and insignificant effect on RGDP proxied for Nigerian economy. Hence, the study concluded that public debt does not exerts significant effect on the Nigerian economy.

Recommendations

This study recommends that since foreign debt impacted negatively on Nigerian economy, government should discontinue borrowing to finance the national budget, in a bid to achieve key macro-economic goals such as price stability, improvement in standard of living, provision of social and economic amenities amongst others, which will bring about economic growth and development in Nigeria. Also, just as in the case of foreign debt, domestic debt yielded negative impact on the Nigerian economy. As such, government should ensure that funds borrowed within Nigeria should be put to proper and judicious use that is capable of bringing economic growth and development in Nigeria and improve the standard of living of the populace.

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