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DOMESTIC DEBT BURDEN AND ITS IMPACT ON THE GROWTH OF NIGERIAN ECONOMY

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ABSTRACT

This study employed secondary data from the Central Bank of Nigeria and Nigeria statistical bulletin to ascertain the effect of debt burden on economic growth of Nigeria. The data is on domestic debt of Nigeria and GDP. The domestic debt data include debts through FGN bond (FBond), Treasury Bill (TBill) and Treasury Bond (TBond) instrument. The GDP is used as the dependent variable whiles the Domestic debt instruments are the independent variables. The two factor Analysis of Variance (ANOVA), regression analysis and correlation measures were used in testing the various hypotheses of interest at 5% level of significance. The study reveals that total domestic debt burden has consistently increased over the years. The study also reveals that only FGN Bond (FBond) and Treasury bond (TBond) have significant impact with the growth of Nigerian economy. The result also shows positive relationship between economic growth and the bond instruments. This study therefore concludes that the increasing domestic debt burden especially through bond instruments significantly translates to economic growth through infrastructural development in Nigeria. The study among other things recommends that Nigeria and states within should try as much as possible to improve on internally generated revenue (IGR) so as to reduce incessant quest for loan leading to ever increasing debt burden of Nigeria.

Keyword: Domestic Debt, Economic growth, Nigerian Economy, & GDP

1. INTRODUCTION

Debt can either be sourced internally or externally whicheveris the source it always have economic effect on the borrower. Internal source involves the borrowing of funds from the citizens of the Country by the issuing of government securities; while external sourceinvolves the borrowing of funds from other countries and, or international organizations like the London Club, the International Monetary Fund (IMF), Paris Club, World Bank, etc. Debt connotes a situation in which a borrower receives something from the lender promising to pay equivalent or more with given percentage on agreement at a specific date. Countries borrow in a situation where they are unable to generate enough domestic savings to carry out their productive activities and service budgets. The funds borrowed are meant to boost economic growth and development of the country thereby improving the standard of living of the citizenry. Governments usually borrow by issuing government bonds, securities, and bills. Countries could also borrow directly from supranational organization such as the World Bank and international financial institutions that are in charge of money or funds borrowing.

Nigeria, like many developing economies, is plagued by increasing government expenditures, unmatched by government generated revenues which has called for the sourcing of funds to execute budget and service the country's concurrent economicdemands. This has resulted in the need for borrowing by governments. Government borrowing becomes indispensable when the conventional revenue sources are inadequate in the financial expenditures of the government. Borrowing is needed by the government to cover fiscal deficit in order to boost domestic economic investment and hence accelerate growth and development. The profile of the Nigerian domestic debt in recent time seems to have reached a stage of serious challenge to Nigerian policy makers and scholars and constitutes an important element of economic agenda.Domestic debt reduction in Nigeria has taken centre stage for conversing realistic pricing of petroleum products in Nigeria as the domestic debt profile has been rising drastically and if not controlled could amount to some unfavourable consequences as crowding out private sector investment, poor GDP growth etc, (Okonjo- Iweala, 2011).Therefore even though the inflow of capital amounts to a build up in debt, the resources generated by higher growth investment should be sufficient to service the incurred debt. However, the logic of capital scarcity in neoclassical model has showed to be different with the experience of poor low-income generating countries. Debt challenges in poor countries cropped up as a result of corrupt practices, uncertainty nature of macroeconomic environment, poor institution, political and social instability, poor debt management strategies, structure of the capital market parameter and high level of financial recklessness (Mba et al;2012).The researcher therefore set out to investigate the effect ofdomestic debt burden on the growth of Nigerian economy.

Purpose of the Study

The aim of this study is to determine the effect of domestic debt on economic growth of Nigeria. The study specifically identified the following objectives:

1. To ascertain the changes that have occurred in the domestic debt burden of Nigeria over the years and across the debt instruments.

2. To assessthe impact of domestic debt on economic growth of Nigeria.

3. To determine the degree of relationship that exist between domestic debt burden and economic growth in Nigeria.

Research Hypothesis

The following null hypotheses are formulated for this study.

1. H_0: No significant changes have occurred in the domestic debt burden of Nigeria over the years and across the debt instruments.

2. H_0: domestic debt does not have significant effect on economic growth of Nigeria.

3. H_0: there is no significant positive relationship between domestic debt burden and economic growth in Nigeria.

2. LITERATURE REVIEW

Several studies relating to public debt and economic growth have been conducted. Some of recent and related studies are reviewed. Adam, Sule and Ibrahim (2016)investigated the impact of Domestic Debt on Economic performance in Nigeria. The data used were secondary source and the models were estimated via the least square(s) method to ascertain the relationship between Domestic Debt and Economic growth, Unemployment and Inflation, after stationary test was conducted on the data with multiple regression analysis was used to analyze the effect of Domestic Debt on inflation, Economic growth and unemployment. Domestic debt has a negative but insignificant adverse effect on economic growth in Nigeria, Domestic debt also has a negative impact on unemployment, and however, the relationship is not statistically significant. The result of the study also indicated that there exist a positive and significant relationship between Domestic debt and inflation in Nigeria in the period under consideration. Hence, for national debt to benefit the economy it must be a productive debt and an efficient debt management scheme should be put in place as a policy to check mate Domestic Debt on Economic performance in Nigeria.

Onyeiwu (2012) examined the relationship between domestic debt and economic growth in Nigeria. The Ordinary Least Squares Method (OLS), Error Correction and parsimonious models was used to analyze the study data.The result shows that the domestic debt holding of government was far above a healthy threshold of 35 percent of bank deposit as the average over the period of study was 114.98 percent of bank deposit presenting evidence of crowding out of private investments. The study therefore recommended that Government should maintain a debt- bank deposit ratio below 35 percent, resort to increase use of tax revenue to finance her projects and divest itself of all projects the private sector can handle while providing enabling environment for private sector investors such as subsidies, tax holidays, guarantees and most importantly improved infrastructure.

Ajayi And Oke(2012)investigated the effect of the external debt burden on economic growth and development of Nigeria. the study adopted the OLS regression analysis on secondary data sourced from CBN, Economic and Financial review, Business times, Financial Standard and relevant publication from Nigeria on variable like National Income, External Reserves, Debt Service Payment, Interest rate among others. The findings of the study show that external debt burden had a negative impact on the nation income and per capital income of the nation. Therefore, high level of external debt can led to devaluation of the nation currency, increase in retrenchment of workers, poor educational system and continuous industrial strike. This can led to the economy of Nigeria getting depressed. Based on the finding the study suggested that debt service obligation should not be allowed to rise above foreign exchange earnings therefore the loan contracted should be invested in profitable venture, which will generate a reasonable amount of money for debt repayment in subsequence time.

Bakare et al (2016) draws on quantitative research framework and specifically employs the Ordinary Least Square Regression (OLS) technique to investigate the relationship between Gross Domestic Product, interest rate, domestic debt, budget deficit and domestic credit to private sector. The paper revealed a positive relationship between domestic debt and economic growth. The work recommended that there is distinctive knowledge that lies in thumb- printing the conceptual and empirical linkages between gross domestic product, domestic debt, interest rate, domestic credit to private sector and budget deficit. Hence the linkages strengthen our understanding about various interpretations which have shaped the workability of the variables both in theory and practice.

Mba el al (2013).Their work principally analysed the importance of domestic debt on economic growth of Nigeria. The study investigated the relationship between government domestic debt and economic growth and policy that is likely to improve private sector investment and break growth and development resistance problem. The study empirically determined the relationship between domestic debt and some macroeconomic variables; they employed the error correction model procedures following an examination of properties of the time series using unit root and co-integration test. The result shows that domestic debt and credit have a significant and direct relationship with GDP and that debt servicing has inverse relationship with GDP and also government expenditure has a direct but not significant relationship with GDP. The implication of the findings concluded that domestic debt should be invested in productive sector of the economy and more specifically in the real sector and further productivity gain will be achieved in the improvement on capital project expenditure in Nigeria.

Essien el at (2016). The paper surveyed the impact of public sector borrowings on prices, interest rates, and output in Nigeria. A Vector Autoregressive framework was utilized, the Granger causality test, impulse response, and variance decomposition of the various innovations to study the impact. It was found out 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.

Babu et al, (2015)The paper empirically explores 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. This study was based on the Solow growth model augmented for debt. Levin-Lin-Chu test (LLC) was used to investigate the properties of the data with respect to Unit roots. The Hausman specification test was used to select the panel fixed-effects model, which was corrected for heteroscedasticity. The results show that domestic debt has a positive significant effect on per capita GDP growth rate in the EAC. The policy implication is to promote sustainable levels of domestic borrowing to enhance growth.

Uchenna el at(2017)The study investigated the effect of external debt on economic growth in Nigeria and if external borrowings and its major determinants like exchange rate, gross fixed capital formation and inflation rate have supported the growth of the Nigerian economy. The parameters of the model were estimated using the ordinary least squares method. The robustness of the result was enhanced using the generalized least squares technique. The result indicated there was evidence of significant positive correlation between economic growth and the explanatory variables namely external debt, inflation rate and exchange rate. A negative correlation was however observed between economic growth and gross fixed capital formation. The regression estimates for both the ordinary and generalized least squares tests show significant positive impact of external debt, exchange rate and inflation rate on economic growth. The results also show non-significant negative effect of gross fixed capital formation on economic growth. The study observed that the external debt has significantly promoted economic growth in Nigeria.

Ajide, (2014)The paper investigated the role of Frazer Economic Freedom Index on FDI-growth relationship over the period spanning 1980 through 2010 using annual time series data. A Multivariate Regression approach was employed to estimate augmented growth models. Quite intriguingly, the impact of disaggregated economic freedom over aggregated composite index was found profoundly revealing. Emanated results show that the same set of variables like labour, life expectancy, degree of openness and economic freedom are factors affecting the level of economic growth in both but at different levels of significance. However, the estimates of disaggregated components of economic freedom data show that the size of government (**negativeeffects)** and freedom to trade internationally (**positive effects**) appears as significant out of five variables making the composite (aggregated) index. The following are therefore suggested for policy applications: curbing unfettered liberalization in the degree of openness, improving and strengthening of the components of economic freedom index, specifically, through reduction in excessive government intervention and those more budgetary allocations should be channelled towards health delivery schemes and education promoting activities since the likelihood of elongating life expectancy is in tandem with such exercises.

Omotosho et al, (2016).The paper work investigated the existence of threshold effects in the relationship between public debt and economic growth in Nigeria using quarterly data. Generally, they founded empirical support for an inverted U-shape relationship between public debt types and economic growth. For total public debt as percentage of GDP, model results identified a threshold level of 73.70 per cent, while the estimated inflexion points for external and domestic debts were 49.4 and 30.9 per cent, respectively. Therefore the implication of the finding was that debt accumulation in excess of the estimated threshold levels could hurt economic growth. A retrospective examination of the country's total and external debts profile indicated that the estimated threshold levels were exceeded prior to the debt forgiveness negotiated in 2005 and largely within limits afterwards.Also, the study founded empirical support for external debt accumulation opportunities, however, they caution that such additional debt incurrence be done in a manner that is consistent with the country's growth objectives.

Mbah, Godwin and Agu (2016) investigated the impact of external debt on economic growth of Nigeria using the ARDL bound testing approach, cointegration and error correction models for the periods 1970 – 2013. In addition, the Granger causality test was also used to check for the direction of causality among the variables. The result of the study indicated a long-run relationship among the variables and external debt impacts negatively significant on output. The study also established a unidirectional causality between external debt and economic growth. Consequently, the study recommended that government should imbibe the habit of savings and formulate policies that will attract foreign exchange that could help in financing developmental projects instead of resolving to borrowing.

Panizza (2008)discussed alternative definitions of external and domestic debt and then introduces a new dataset on domestic and external public debt. It uses this dataset to describe recent trends in the composition of public debt in developing countries and discusses the reasons for these trends. The paper also identified possible challenges and opportunities arising from the new debt management strategy adopted by several emerging and developing countries and points out that there are conceptual and practical issues with the traditional external/domestic debt dichotomy. In doing so, the paper discussed possible trade-off between domestic and external borrowing and suggested that while the switch towards more domestic borrowing can play a positive role in reducing the risks of sovereign finance, policymakers should not be too complacent.

3. RESEARCH METHOD

This study employed secondary data from the Central Bank of Nigeria and Nigeria statistical bulletin. The data is on domestic debt in Nigeria and GDP. The domestic debt data include FGN bond (FBond), Treasury Bill (TBill) and

Treasury Bond (TBond). The GDP is used as the dependent variable whiles the Domestic debt instruments are the independent variables. The two factor Analysis of Variance (ANOVA), regression analysis and correlation measures were used in testing the various hypotheses of interest at 5% level of significance.

4. RESULT AND DISCUSSION OF FINDINGS

The various results of hypotheses tests and models are presented in this section. The ANOVA was used to test if there is any significant variation in the debt burden of Nigeria over the years and across the debt instruments. The regression analysis was used to determine the relationship between the debt instruments and economic growth in Nigeria as well as to determine the effect of debt burden on the growth of Nigerian economy.

Table 1a: Summary Statistics for ANOVA test

SUMMARY	*Count*	*Sum*	*Average*	*Variance*
2003	3	1328.215	442.7382	141672.5
2004	3	1369.075	456.3584	160347.5
2005	3	1524.927	508.3089	97149.7
2006	3	1752.539	584.1797	22475.29
2007	3	2169.018	723.0059	167856.2
2008	3	2319.787	773.2624	340241.5
2009	3	3164.479	1054.826	676028.1
2010	3	4551.602	1517.201	1641817
2011	3	5622.843	1874.281	2556057
2012	3	6537.536	2179.179	3509544
2013	3	7118.979	2372.993	3848095
2014	3	7904.025	2634.675	5078170
2015	3	8836.996	2945.665	7728995
2016	3	11058.2	3686.068	13627096
2017	3	12471.6	4157.2	18482174
Bills (TBill)	**15**	**25245.76**	**1683.051**	**1165203**
Bonds (Fbond)	**15**	**47272.63**	**3151.509**	**7445065**
Bonds (Tbond)	**15**	**5211.428**	**347.4286**	**6475.422**

The summary statistics in table 1a presents the descriptive statistics for the debt instruments over the years. The descriptive results show that the total domestic debt burden has consistently increased over the years. The average debt burden over the instruments has also consistently increased over the years since 2003 till date. The FGN Bond was found to be the most subscribed debt instrument followed by the Treasury bill as they have the highest sums and averages respectively.

Table 1b: Two Factor ANOVA Result

Source of	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*

Variation						
Years	63494578	14	4535327	2.222428	0.035042	2.063541
Instruments	59015609	2	29507804	14.45959	4.86E-05	3.340386
Error	57139830	28	2040708			
Total	1.8E+08	44				

The Analysis of Variance (ANOVA) result is presented in table 1. The p-value of the test of variation of debt burden over the years which is less that 5% (0.05) level of significance leads to the conclusion that the domestic debt instruments have significantly changes over the years. Similarly, the result also shows that there is significant variation in the amount of debt burden across the instruments.

Table 2a: Summary Statistics for Domestic Debt and Economic Growth

Regression Statistics	
Multiple R	0.96875
R Square	0.938476
Adjusted R Square	0.921697
Standard Error	3853616
Observations	15

Table 2a presents the summary statistics for debt burden and economic growth in Nigeria. The result present Multiple R value of 0.96875 which means that the domestic debt burden has 96.875% linear relationship with economic growth in Nigeria through the various debt instruments. The R-squared 0.938476 reveals that approximately 93.85% variation in economic growth of Nigeria is attributable to domestic debt burden.

Table 2b: Regression Model Coefficients and test of Significance of Variables

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	-6.2E+07	48092766	-1.28721	0.224448
Bills (TBill)	4962.802	3473.751	1.428658	0.180878
Bonds (Fbond)	9232.249	2772.946	3.3294	0.006718

Bonds (Tbond)	214574.3	107385.8	1.998162	0.071027

Table 2b presents the regression coefficients and their corresponding test of significance of variables for the relationship between domestic debt burden and economic growth in Nigeria. the results shows that only FGN Bond (FBond) and Treasury bond (TBond) have significant impact with the growth of Nigerian economy since the p-values of their corresponding coefficients are less than 0.05 respectively. The result also shows positive relationship between economic growth and the bond instruments

5. CONCLUSION

The results of the various test of hypothesis have been presented in this study. The study reveals that total domestic debt burden has consistently increased over the years. The average debt burden over the instruments has also consistently increased over the years since 2003 till date. The FGN Bond was found to be the most subscribed debt instrument followed by the Treasury bill as they have the highest sums and averages respectively. The domestic debt instruments have significantly changes over the years. Similarly, the result also shows that there is significant variation in the amount of debt burden across the instruments. It is of no doubt that every Nigerian government that comes into power both at federal and state levels will at one time or the other obtain load for one infrastructural development or the other. This has consistently increased the debt burden of Nigeria at all times.

The result also reveal that only FGN Bond (FBond) and Treasury bond (TBond) have significant impact with the growth of Nigerian economy since the p-values of their corresponding coefficients are less than 0.05 respectively. The result also shows positive relationship between economic growth and the bond instruments. This result is also suggestive of the fact that the bond instruments are mostly issued by the Federal Government of Nigeria with low risk and high return making it consistently subscribed. This tends credence to the fact that most FGN bonds are targeted at drastic infrastructural development leading to corresponding economic growth in Nigeria. This study therefore concludes that the increasing domestic debt burden especially through bond instruments significantly translates to economic growth through infrastructural development in Nigeria. Based on these finding this study recommends that even though debt burden has been found to translate into significant economic growth, Nigeria and states within should try as much as possible to improve on internally generated revenue (IGR) so as to reduce incessant quest for loan leading to ever increasing debt burden of Nigeria. When credit facilities are taken, government should try to invest them in revenue yielding venture so as to be able to regenerate such funds to settle the debt.

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