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Impact of Debt and Debt Servicing on Nigeria's Economic Growth

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ABSTRACT: This study examined the impact of debt and debt servicing on Nigeria's economic growth, using data for the period of 1981-2020. The objectives of this study were: To examine the effect of domestic debt, external debt and debt servicing on economic growth of Nigeria. The data for the study were sourced from Central Bank of Nigeria Statistical Bulletin. The variables domestic debt, external debt, debt servicing and real gross domestic product. Ordinary least squared (OLS) method of data analysis was adopted, including the unit root test, co-integration approach, as well as Error Correction Mechanism. E- View software was used for the analysis. The study found that debt servicing has a negative sign and it's statistically insignificant. External debt has a positive sign and it's statistically significant. Domestic debt has a negative sign and it's statistically significant. The study underscore the need for policymakers to limit excessive domestic borrowing to avoid crowding out private sector investment, by adopting alternative non-debt financing strategies such as Public-Private Partnerships (PPPs); as well ensure that domestic borrowing is targeted toward capital projects with measurable economic returns. The government should sustain and improve the efficiency of external borrowing by focusing on concessional loans and using borrowed funds for infrastructure, health, education, and industrial development. More so, The government should negotiate better repayment terms or restructure existing debt to ease the fiscal burden, create and maintain a sinking fund dedicated to future debt repayments.

Keywords: Domestic Debt, debt service, economic growth

INTRODUCTION

Government spending is a function of her income. Like corporate entities' government articulate

her expected income and expenditure on yearly basis in a budget. This is a plan of action prepared by government or corporate entity expressed in financial terms, for a given period, usually a year (Adafu and Abula,

2018). Sometimes the expected expenditure exceeds the expected income, when that happens, it is known as budget deficit in financial parlance. The short fall in income is in most cases financed through borrowing with attendant cost and associated terms and conditions relating to payment patterns at maturity. Essien, Agboegbulem, Mba and Onumonu (2016), observes that borrowing by countries is occasioned by inability to raise enough revenue from local sources for the administration of government business. Borrowed fund if well applied is expected to accelerate economic growth and development in a country. The attendant effect is likely to be improved welfare and standard of living of the citizens. There are arguments and counter argument about borrowing. Chinanuife, Eze, and Nwodo (2018), posit that the practice of borrowing is not bad, if borrowed fund is used judiciously.

External debt is a major source of public receipts. The accumulation of external debt should not signify slow economic growth. It is a country's inability to meet its debt obligation compounded by the lack of information on the nature, structure and magnitude of external debt (Were, 2001). Soludo (2003) opined that countries borrow for two broad categories; macroeconomic reasons to either finance higher investment or higher consumption and to circumvent hard budget constraint. This implies that an economy borrow to boost economic growth and alleviate poverty. He argued that when debt reaches a certain level, it becomes to have adverse effect, debt servicing becomes a huge burden and countries find themselves on the wrong side of the debt-laffer curve, with debt crowding out investment and growth. The debt service burden has militated against Nigeria's rapid economic development and worsened the social problems (Audu, 2004).

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 astronomically and if not controlled could create some unfavorable consequences as crowding out private sector investment, poor GDP growth etc, (Okonjo-Iweala, 2011; Nwankwo, 2017; Gabriel, Afamefuna & Baridam, 2016). On the other hand, government has to continue to finance projects to grow the economy and one viable option of doing so is by issuing debt instruments. For example, the 2012 national budget presented to the national assembly contains a deficit of N1.11trillion which has to be financed majorly through domestic debt. As at September 2011, Nigerian domestic

debt stood at N5.3 trillion, an equivalent of $34.4 billion while external debt was $5.6 billion bringing the National debt to a total of 40 billion dollar which amounted to 19.6 percent of GDP. Nigeria's rising public debt profile has become a significant concern for policymakers, economists, and the general public. While borrowing is often necessary to bridge fiscal deficits and fund development projects, Nigeria's growing dependence on both domestic and external debt has raised critical questions about the sustainability and long-term implications for the nation's economy.

The core problem lies in the disproportionate growth of debt servicing obligations relative to revenue generation. A significant portion of Nigeria's annual budget is now allocated to debt servicing, which crowds out expenditure on critical sectors such as education, healthcare, and infrastructure. Despite increased borrowing, the country continues to struggle with high unemployment, poverty, and low economic growth, suggesting that the borrowed funds may not be effectively deployed for productive investment (Ekwunife, Nduka, & Ogini, 2022; Logan, Okanya, Nduka, Manasseh, Ede, Onoh, Omeje, Ozioko & Agu, 2025).

Manasseh, Logan, Nduka, Ede, Lawal & Ugwu (2025) argue that exchange rate volatility and revenue shortfalls, especially from oil exports in Nigeria’s primary revenue source, exacerbate the debt burden and raise the risk of debt distress. This situation poses a serious threat to macroeconomic stability and undermines the country's ability to achieve sustainable development (Nduka, Nwankwor & Egungwu, 2024; Ogunewe, Ananwude, & Nduka, 2020).

According to Ekwunife, Emuveyan, & Nduka (2021), unless urgent reforms are undertaken to improve revenue generation, ensure fiscal discipline, and enhance the productivity of public spending, Nigeria risks entering a debt trap where new borrowings are used primarily to service existing obligations rather than drive real economic growth . Existing literature such as Alison (2013); Abbas and Christerisen (2017); Nduka and Achugbu (2014), show that debt and debt service significantly positively influences the economy, while studies such like, Idehi & Uzonwanne (2021), Ekor, Orekoya, Musa, and Damisah, (2021), showed that debt and debt service has no significant effect on the Nigeria’s economy. The conflicting results created a gap that this study intends to fill, by

examining the effect of debt and debt service on the Nigeria economic growth.

LITERATURE REVIEW

Conceptual Framework

External Debt

Debt according to Oyejide, Soyede and Kayode (2014) is the resource or money used in an organization that is not contributed by its owner and does not in any other way belong to them. It is a liability represented by a financial instrument or other formal equivalent. This is divided into external debt and domestic/internal debt. While external debt according to Arnone, Bandiera and Presbiterio (2015) is defined as that portion of a country's debt that is acquired from foreign sources such as foreign corporations, government or financial institutions. According to Ogbeifm (2007), external debt arises as a result of the gap between domestic savings and investment. As the gap widens, debt accumulates, and this makes the country to continually borrow increasing amounts in order to stay afloat.

Nigeria external debts dated back to pre-independence era when it acquired its first loan of twenty-eight (28) million US dollars from World Bank, to finance the construction of railway. Ayadi and Ayadi (2016) reported that by 1960, the Nigeria's external debt profile had risen to 150 million US dollar. Nduka, Ananwude, & Osakwe (2019) argue that the quest for developmental plans and the need to finance the flamboyant lifestyle of government leaders in Nigeria, increased the federal government expenses, thereby surged up the country's external debt to 1 billion US dollar by 1971 (Olasode & Babatunde, 2016). According to Muhammad & Fayyaz (2015), external debts affect the economy in different ways, explaining that where efficient use of external debts can bring economic prosperity to a nation, their inefficient use can cause severe damages as well. In essence, what matters most is not the amount of the foreign loans but the ways the loans are used in developmental process in the economy.

Domestic Debt

Domestic debt on the other hand, is defined by Ozurumba and Kanu (2016) as the portion of a country's debt borrowed from within the confines of the country. Domestic debt is usually issued in the local currency and is subject to the jurisdiction of the country's central bank Likita (2010), Nduka & Achugbu (2014). Domestic debt can take various forms, such as treasury bills, government bonds, corporate bonds, and loans from local

financial institutions. Domestic debt is an important source of financing for governments and businesses, as it can provide a stable and predictable source of funding (Oyejide, 2015). These loans are usually obtained from the Central bank, deposit money banks, discount houses and other non-bank financial houses.

Domestic Debts are debts that originate from within the geographical region of a country, which are contracted through debt instruments such as treasury bills, treasury certificates and treasury bonds. Others are development stocks, bonds and Promissory notes. However, excessive domestic debt can lead to financial instability, high interest rates, and inflationary pressures.

Debt Servicing

Debt servicing refers to the process of making regular payments to creditors in order to repay borrowed funds. These payments typically include both principal and interest and are generally made on a fixed schedule. Debt servicing is an essential component of maintaining a healthy financial position for both individuals and organizations. For individuals, debt servicing can impact their credit scores and ability to borrow in the future. For organizations, debt servicing can impact their profitability and creditworthiness (Abbas and Christerisen, 2017). The cost of debt servicing can vary depending on factors such as the amount borrowed, the interest rate, and the loan repayment schedule. Debt servicing involves making regular payments according to a predetermined schedule, usually based on the loan agreement. These payments are typically made monthly, quarterly, or annually, depending on the type of debt and the terms of the agreement (Stieglitz, 2012). The interest rate on a loan can significantly impact the cost of debt servicing. Higher interest rates can make debt more expensive to service, while lower interest rates can reduce the overall cost of borrowing

Theoretical Framework

Debt Overhang Theory

The modern debt overhang theory was formally credited to Krugman (1988) and Sachs (1989). Although its roots trace back to earlier discussions in the 1980s during the Latin American debt crisis. The Debt Overhang Theory suggests that if a country's external debt exceeds its ability to repay, the debt acts as a disincentive for both domestic and foreign investment. Investors expect that a large portion of future profits will be used to service debt rather than generate returns,

thereby discouraging new investments. In such cases, even if new loans are provided or existing loans are restructured, the uncertainty about the country's debt sustainability remains a barrier to economic growth. The expectation of future taxes or austerity to service debt creates a negative environment for investment and innovation. Nigeria's rising debt and the large share of government revenue allocated to debt servicing suggest a classic debt overhang situation. The fear that future revenues will be consumed by interest payments rather than development may deter private investment and stifle growth.

Crowding-Out Effect Theory

The crowding-Out Effect theory was rooted in the Classical Economic Theory, especially developed during the works of economists like David Ricardo (early 19th century). It was later emphasized by Milton Friedman and monetarists in the 20th century (1950s–1970s). The Crowding-Out Effect occurs when government borrowing leads to higher interest rates in the financial market, which in turn discourages private investment.

When the government competes for limited financial resources (such as loans), interest rates rise, making it more expensive for businesses and individuals to borrow and invest. This effect is especially problematic in developing countries with shallow capital markets like Nigeria, where government borrowing significantly affects interest rates and credit availability. Heavy domestic borrowing by the Nigerian government through treasury bills and bonds can crowd out private sector access to credit. High interest rates make it difficult for SMEs and local investors to access loans, reducing economic activity and slowing growth.

Keynesian Public Debt Theory

The Keynesian Public Debt theory was propounded by John Maynard Keynes in the 1930s, especially during the Great Depression. Keynes argued that in times of economic downturn, governments should increase spending, even if it means running deficits to stimulate demand, reduce unemployment, and restore economic stability. Public borrowing is justified when used for productive investment, such as infrastructure and education, which can lead to long-term economic growth. Keynes rejected the classical idea that government should always maintain a balanced budget, advocating instead for counter-cyclical fiscal policy - spend during recessions, save during booms. Keynesian theory supports Nigeria's use of borrowing to finance capital projects and

economic stimulus, especially during periods of revenue decline or recession. However, the issue arises when borrowed funds are used for recurrent expenditure rather than productive investment, weakening the growth-driving effect that Keynes envisioned.

Empirical Review

Idehi, & Uzonwanne, (2021) examined the impact of external debt on economic growth in Nigeria in the period, 1985 to 2019 by examining the causality between external debt stock and economic growth in Nigeria and identify the impact of external debt servicing on economic growth in Nigeria. The study employed the Harrod-Domar theory of economic growth and the Two-Gap model as theoretical framework to explain the impact of external debt on economic growth in Nigeria. The study made use of secondary data sourced from World Development Indicator 2019. Ordinary least square (OLS) technique was adopted for the regression analysis. The data were analyzed with the aid of e-view software (9th edition). The result showed that external debt has negative and insignificant impact on economic growth in Nigeria. Therefore, the study recommended the use of tax revenue to finance public deficit, encouragement of foreign direct investment and domestic investment through improvement in infrastructural facilities and an enabling environment devoid of political and economic instability.

Ekor, Orekoya, Musa, and Damisah, (2021). examined if external debt impair economic growth in Nigeria 1996-2020. The debt and economic growth debate remain topical in Nigeria given the controversies that often trail the government's plan to always borrow to fund the annual budget deficits. This study provides an empirical contribution to the national discourse by assessing the impact of foreign debt on the Nigerian economy. Variables of the study were external debt stock , debt service, GDP Applying a dynamic variant of the auto-regressive distributed lag model, the main result from this study is that in the long run, external debt accumulation and the associated service payments have negative effects on the economy. The policy implication is that government should always ensure that external debt accretion is sustainable and used for infrastructure development.

Alagba & Eferakeya .(2019) investigated the effect of public debts on economic growth of Nigeria for the period of thirty-eight (38) years, 1981 to 2018. Relevant secondary data

were sourced from Central Bank of Nigeria Statistical bulletin and Debt Management Office. Among the objectives of the study is to: analyze the effect of domestic debts on the economic growth of Nigeria and evaluate the effect of foreign debts on the economic growth of Nigeria. The variables were Federal Government Total Expenditure, Federal Government Domestic Debt, Federal Government Foreign Debt, Cost of servicing debt, Federal Government Retained Revenue. The findings showed that domestic debts of the Federal government of Nigeria is positive and statistically significant to economic growth of Nigeria while foreign debts contribute less to the economic growth of the country. Cost of debts servicing is significant and has a negative effect on economic growth. he study therefore concludes that the Federal government should reduce the rate at which it results to loans, especially foreign loans as a means of financing budget deficits

Ekpe, (2020) investigated the impact of external debt on economic growth in Nigeria From 1981-2019. The study employed the Auto regressive distributed lag method, Bounds test and the Granger causality test as analytical technique. The study found that external debt assumes a positive and insignificant relationship with gross domestic product. Also, the ratio of external debt to export indicates a negative and statistically significant relationship with gross domestic product. The study also discovered that exchange rate indicates a positive and significant relationship with gross domestic product. It also found that inflation rate and interest rate assume a negative insignificant relationship with gross domestic product. The study recommends that government should diversify the nation's export base so as to increase export earnings and promote industrialization in order to reduce import dependency as a high exchange rate will make our goods more attractive in the foreign market and will increase foreign exchange earnings.

Nduka & Achugbu (2014) examined the effect of domestic debt on selected macroeconomic variables in Nigeria. The study used selected macroeconomic variables using GDP, financial deepening and foreign exchange rate. Using the Ordinary Least Square regression technique, the results showed that domestic debt accounts for about 82% of changes in Nigerian economy and significantly influences the economy. Further analysis showed that domestic debt has no significant effect on GDP growth and exchange rate in Nigeria. Moreover, domestic

debt significantly influenced financial deepening. Hence, the study concludes that domestic debt has helped to beef up the amount of money in circulation thereby making available investible funds.

Eke, & Akujuobi,. (2020) investigated the effect of public debt on economic growth in Nigeria, covering the period 1981-2018. Employing a co-integration approach, the study revealed prominent among others that a significant short-run relationship exists between Nigeria's public debt and economic growth. Also, the study further showed that whereas both the domestic debt and the external debt variables were statistically significant, only the latter failed the a priori expectation test and thus, exerts a negative contribution to economic growth in Nigeria. On the basis of the findings, the study concluded that most of the external borrowings in Nigeria end up being misappropriated. Hence, the recommendation is that there should be proper ways of monitoring public borrowings with special emphasis on all external debts contracted with a view to ensuring that misappropriation is drastically reduced, if not eradicated. See also Ajayi, & Edewusi, (2020); Matthew and Mordecai (2016); Matthew and Mordecai (2016)

Abdulkarim & Saidatulakmal (2021) investigated the effect of government debt on Nigeria's economic growth using annual data from 1980 to 2018 and the Autoregressive Distributed Lag technique. The empirical results showed that external debt constituted an impediment to long-term growth while its short-term effect was growth- enhancing. Domestic debt had a significant positive impact on long-term growth while its short-term effect was negative. In the long term and short term, debt service payments led to growth retardation confirming debt overhang effect. The findings suggested that the government should direct the borrowed funds to the diversification of the productive base of the economy.

Adubofour Mangudhla & Dadzie (2021) the impact of external debt on economic growth in Ghana The debt position of a country is crucial to the growth of its economy. We argue with empirical basis in this study that, external debt has impact on the growth of Ghana's economy. A time- series data, spanning from 1991-2019 was analyzed. The findings of the study suggested a statistically significant and inverse relationship between external debt and economic growth. It is also argued in the study that, Ghana's inflation regime has a significant impact on the growth

of her economy. The study further verified the relationship between foreign direct investment and economic growth in Ghana. Results of the study revealed a significant and direct relationship between foreign direct investment in Ghana and the growth of the country's economy. A test on granger causality found no causal linkage between external debt and economic growth in Ghana. The contribution of the study was finally discussed and limitations stated to serve as a guide for future study. See also Matuka, Asafo, & Adelajda (2018); Anning, & Ofori, & Affum, (2016); Tunde, Omotayo, Austin & Afamefuna, (2016).

Oke and Sulaiman (2012) carried out a study to examine the effect of external debt on economic growth and investment rate in Nigeria from 1980 to 2008 using a growth model known as Debt cum model where they used econometric method of multiple regressions to analyze these impact. The result from their findings revealed the existence of positive relationship between external debt, investment and economic growth. Their study further showed that current external debt ratio of gross domestic product fosters growth in the short term whereas private investment which measures real and tangible development reduced. See also Udofia and Akpanah (2016); Amassoma (2011); Onyeiwu & Oladipopo (2018); Sulaiman & Azeez, (2012)

Gap in Literature

From the literature reviewed above, it is evident that most of the studies are based on the impact of debt (either external or domestic) on the economic growth of the various countries of study with no researcher paying attention to the impact of domestic debt on export performance of any of the countries of study to the knowledge of the researcher. This therefore forms a strong research gap to be filled by this study.

METHODOLOGY

The study utilized an ex-post facto research design to examine the effect of debt and debt service on Nigeria economic growth. The ex-post facto research, also known as non-experimental design that explores the relationship between variables after they have naturally occurred. In this design, the researcher lacks control over the independent variable but retrospectively analyzes its effects on the dependent variable(s). The data for this research were obtained from the Central Bank of Nigeria Statistical Bulletin, spanning 40 years period, specifically from 1981 to 2020,

creating a time series of annual data on total domestic debt outstanding, national savings, debt servicing and real gross domestic debt. . Note that foreign exchange earning is the dependent variable where trade total domestic debt outstanding, national savings, debt servicing is the independent variables. The econometric software of e-view version 10 was used in running the regression.

Model Specification

The essence of economic modeling is to present the phenomenon under investigation in such a way to enable the researcher attribute numerical value to the concept. Taking inference from the empirical findings and theories which have been derived from the theoretical expeditions of the exogenous growth model, and the making domestic debt central to the equation a model will be drawn up to determine foreign exchange earnings in the Nigeria context , the model is specified as

RGDP = F (DD, EXD, DES)

Where

RGDP= Real gross domestic product

DD =Domestic Debt

EXT =External debt

DES = Debt servicing

F = Functional notation

$RGDP = b_0+b_1 DD +b_2 EXD + B_3 DES+\mu$

Where

b0 = Autonomous

b1 = coefficient of parameter DD

b2 = coefficient of parameter EXD,

b3 =coefficient of parameter DES

μ = stochastic error term

The variable can also be put in a logged for as

$FEE = Log \beta_0 + log \beta_1 DD+ \beta_2 EXD+ \beta_3 Des+\mu$

Where

Log = logged value of the variable

Method of Evaluation

In evaluation of this research work, we shall employ some criteria such as economic, econometric and statistical criteria.

Evaluation Based on Economic Criteria (A'priori Expectation)

This is based on the principle of economic theory. Here, our results can be checked for their reliability with both the size and sign of economic a'priori expectation.

Evaluation Based on Statistical Criteria (First Order Tests)

- Coefficient of multiple – regression (R^2)

This is the summary measure that tells how we the sample regression line fits the data. It is a non-negativity quantity. Its limits are $0< r^2 < 1$. An R^2 of 1 means a perfect fit, on the other hand, an R^2 of zero means that there is no relationship between the regressand and the regressor (Gujarati, 2001).

- **T – Statistics**

This test shows the significance of the parameter estimates. The obtained values of the t-ratio will be compared with the tabulated value. The decision rule is that when the calculated value of t-statistics is greater than the table value, at 5% level of significance and n-k degree of freedom the null hypothesis is rejected and the alternative accepted (koutsoyiannias 1997).

- **F – Statistics**

This measures the overall joint significance of the entire regression plane. It aims at finding if the entire influences of the explanatory variables do actually have any significant influence on the dependent variables. When the tabulated F is more than the calculated fat 5% level of significance and n-k degree of freedom, the null hypothesis is rejected and the alternative accepted (Koutsoyiannias 1997).

Evaluation Based on Econometric Criteria

i. Auto correlation test

Auto correlation can be caused by several factors such as specification, bias (excluded variable case) manipulation of data, transformation and non-stationary of data and inconsistency of data. The most celebrated test for detecting autocorrelation is that developed by statistician Durbin and Watson. It is popularly known as Durbin-Watson d-statistics.

ii. **Co-integration**

Two variable may be co-integrated, If they have long run equilibrium relationship between them. As Granger noted, a test for co-integration can be thought as a test to avoid spurious regression situation. "In co-integration, the slope of the parameter is known as the co-integration parameter, Engle granger (EG) and augmented Engle grange tests are used in testing for co-integration. Co-integration deals with the relationship amongst a group of variables (unconditionally) where each variable has a unit root

iii. Error correction mechanism (ECM)

Error correction mechanism was first used by Sagaran and later popularized by Engle Granger. It corrects for equilibrium. Granger presentation theorem states that if two variables (x and y) are co-integrated, the relationship between them may be expressed as an error correction mechanism.

RESULTS AND DISCUSSION OF FINDINGS

The model was specified to capture the impact of Nigerian's domestic debt on her foreign exchange earnings. The method used was the Ordinary Least Square (OLS) regression technique, this method was chosen over other because of its "BLUE" properties "Best Linear unbiased Estimates, it is also efficient and consistent, When compared with other linear unbiased estimator the OLS is said to possess the least or minimum variance. The data used in the analysis is presented in the appendix.

Unit Root Test

Many macro-economic time series contains unit roots dominated by stochastic trends as developed by Nelson and Plasser (1982). Unit root test are important in examining the stationary of a time services because a non-stationary regressor invalidates model or result. Granger and new bold (1924) have found by simulation that the F-calculated from the regression involving the non-stationary distribution has a rightward shift, the null hypothesis of no causality. Thus, the significance of the test is overstated and a spurious result is obtained. The presence of unit root in a time series data or non-stationary data can be tested using the augmented Dickey-fuller (ADF) test .below in table 4.1 is the summary of the unit root test.

Table 1: Result of the Unit Root Test

Variable	ADF	Integration	Significance
RGDP	-6.887755	I(2)	1%
DD	-4.212483	I(2)	1%
EXD	-3.951796	I(1)	1%
DES	-5.467603	I(1)	1%

Source: Author's computation using E-view version 10

From the table above it was observed that none of the variables is stationary at level, but real gross domestic product, and domestic debt are stationary at second difference I(2) while national savings, debt saving are stationary at first difference I(1). This implies that all the variables are stationary at the order of integration stated above and at 1% level of significance.

Co-integration Test

The co-integration test is done using the Mackinnon-Haugh-Michelies P-values, which is used to test whether a long-run equilibrium relationship exists among the variables under investigation. The table 2 below shows the summary of the Mackinnon-Haug-Michelis co-integration test.

Table 2: Co-integration Result: Unrestricted co-integration rank test (trace)

Hypothesized No of CE	Eigen value	Trace statistics	0.05 critical value	Prob
None *	0.754438	70.26240	47.85613	0.0001
At most 1	0.261850	25.32782	29.79707	0.1501
At most 2	0.260204	15.61235	15.49471	0.0480
At most 3	0.170146	5.968182	3.841466	0.0146

Source: Author's computation using E-view version 10

Trace test indicates I co-integrating equ(s) at the 0.05 level* denotes rejection of the hypothesis at the 0.05 level** Mackinnon-Haug-Michelis (1999) P-values.

Unrestricted Co-integration Rank Test (Maximum Eigen value)

Hypothesized No of CE	Eigen value	Trace statistics	0.05 critical value	Prob**
None *	0.754438	44.93458	27.58434	0.0001

At most 1	0.261850	9.715468	21.13162	0.7709
At most 2	0.260204	9.644168	14.26460	0.2364
At most 3	0.170146	5.968182	3.841466	0.0146

Source: Author's computation using E-view version 10

Max-Eigen value test indicates 1 co-integrating equ(s) at the 0.05 level* denotes rejection of the hypothesis at the 0.05 level** mackinnon-Haug-michelis (1999) P-value

From table 2 above, it is observed that trace statistics and max-Eigen indicates one co-integration equation at 5% level of significance. Based on the evidence above, we can safely reject the null hypothesis (Ho) which says that there are no-co-integrating vectors and conveniently accept the alternative (Hi) of the presence of co-integrating vectors. This implies a long-run equilibrium relationship between the dependent and independent variables.

Presentation of the Regression Result

The full part of our regression result for this analysis is attached as an appendix to this study. However, the diagnostic tests or some key statistics or the variable that needs to be interpreted is shown below.

Table 3: Error Correction Model Result

Variable	Coefficient	Std error	T-test	Prob
C	10.84799	0.048717	222.6751	0.0000
DES (-1)	-0.010169	0.000398	-0.425731	0.6737
LEXD (-1)	0.217089	0.015846	13.70009	0.0000
LDD (-2)	-0.043251	0.017742	-2.437817	0.0216
ECM (-1)	-0.364083	0.118884	-6.427150	0.0000

Source: Author's computation using E-view version 10

R- Square	0.993773
Adjusted R- Square	0.992850
F- Statistics	1077.152
Prob (F- statistic)	0.00000
Durbin-Watson	1.598390

Interpretation of the Regression Result

The model adequacy and adjustment speed indicates that the Error Correction Term (ECM-1) is negative and significant (-0.364083, p = 0.0000), confirming that there is a stable long-run relationship among the variables. The model corrects about 36.4% of disequilibrium in each period, suggesting a

fairly moderate speed of adjustment toward equilibrium.

Additionally, the model demonstrates a strong goodness-of-fit, with R-squared (R^2) = 0.993773 and Adjusted R-squared (R^2) = 0.992850, indicating that over 99% of the variation in RGDP is explained by the independent variables. The F-statistic is highly significant, and the Durbin-Watson statistic (1.598) suggests no serious autocorrelation problems.

Hypothesis Testing

The need to examine the relationship between the collected data and the stated hypothesis has called for this section. This result will be compared with the statistical criteria to see if the preconceived notion in this research work holds or not.

Hypothesis one

From the result report of our t-test in table 4.3 above it was observed from the T-statistics Column that the value is of domestic debt is -2.437817 with the probability of 0.0216. Now since 0.0216 is less than the desired level of significant (0.05) we accept the alternative (Hi) which says that domestic debt has a significant impact on real gross domestic product.

Hypothesis Two

Thus drawing inference from our estimated regression model, it could be observed that national saving value is 13.70009, with its probability of 0.000; since its probability is less than 0.05 level of significant we accept the alternative (Hi) and say that external debt has significant impact of real gross domestic product.

Hypothesis Three

Thus drawing inference from our estimated regression model, it could be observed that money supply value is -0.425731 with its probability of 0.000; since its probability is greeter than 0.05 level of significant we accept the alternative and say that debt servicing has no significant impact on real gross domestic product

CONCLUSION

This study examined the effects of domestic debt (DD), external debt (EXD), and debt servicing (DES) on Nigeria's economic growth, using Real Gross Domestic Product (RGDP) as the dependent variable. The Error Correction Model (ECM) results provide several key insights aligned with the study's specific objectives: The results show that domestic debt (LDD) has a negative and statistically significant effect on economic growth, with a coefficient of -0.043251 and a p-value of 0.0216. This indicates that

increased reliance on domestic borrowing may be crowding out private investment due to rising interest rates or inefficient allocation of funds. The coefficient for external debt (LEXD) is positive and highly significant (0.217089, p = 0.0000). This suggests that when external debt is properly managed and invested in growth-enhancing projects, it can have a positive impact on Nigeria's economic output. Although the coefficient for debt servicing (DES) is negative (-0.010169), it is statistically insignificant (p = 0.6737), indicating that, in the short run, debt servicing may not have a direct or immediate significant effect on economic growth. However, the negative sign still raises concern over the long-term sustainability of Nigeria's debt burden.

In light of the findings, the following recommendations are made to policymakers and relevant financial institutions:

1. Government should limit excessive domestic borrowing to avoid crowding out private sector investment.; Adopt alternative non-debt financing strategies such as Public-Private Partnerships (PPPs); as well ensure that domestic borrowing is targeted toward capital projects with measurable economic returns.

2. The government should sustain and improve the efficiency of external borrowing by focusing on concessional loans and using borrowed funds for infrastructure, health, education, and industrial development, also ensure transparency and accountability in the allocation and implementation of externally financed projects.

3. While debt servicing was not statistically significant in the short run, it poses long-term risks. The government should negotiate better repayment terms or restructure existing debt to ease the fiscal burden, create and maintain a sinking fund dedicated to future debt repayments.

4. Government should broaden the tax base and improve collection efficiency to reduce dependence on borrowing, diversify the economy to reduce vulnerability to oil price shocks, which affect government revenue and borrowing needs.

5. Debt Management Office (DMO) should be strengthened as well as related institutions with a mandate for debt sustainability analysis, monitoring, and reporting; Enforce fiscal responsibility laws to limit unproductive borrowing and ensure intergenerational equity.

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