

FEDERAL GOVERNMENT DOMESTIC CHARACTERISTICS AND ECONOMIC REVITALIZATION IN NIGERIA (1990 – 2023)

Ifeanyi Racheal Ebodili¹, Omokhai Gabriel Osaigbovo² Francis N. Udeh³

^{1,2&3}Department of Accountancy, Faculty of Management Sciences, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

Emails: ¹ifeanyiebodili@gmail.com; ²gabrielomokhai@gmail.com
& ³fn.udeh@unizik.edu.ng.

Correspondence: gabrielomokhai@gmail.com

ABSTRACT

This study investigated the complex relationship between the domestic characteristics of federal government and the economic revitalization of Nigeria from 1990 to 2023, with a specific focus on key economic variables: Gross Domestic Product (GDP), treasury bonds, and treasury bills. Over these three decades, Nigeria has experienced significant political, social, and economic transformations, driven by various government policies, institutional reforms, and socio-political dynamics. Key areas of investigation include Economic Growth which was measured with GDP (dependent variable) and the treasury bonds and treasury bills which both served as measures for domestic characteristics (the independent variable).. The study assesses how these instruments have been used to stimulate economic growth. Thus, it employed a mixed-methods approach, combining quantitative data analysis of economic indicators with qualitative insights from policy documents and case studies. The quantitative analysis includes evaluating GDP growth, treasury bond and treasury bill yields. Qualitative insights are derived from analyzing policy documents, and case studies to provide a comprehensive understanding of the federal government's role in economic revitalization. Findings made indicated that there is positive but no significant relationship between Treasury bonds and economic growth in Nigeria during the period 1990-2023. It was also established that there is co-integration between gross domestic product growth rate and Treasury bills in Nigeria. Also, while certain federal initiatives have spurred economic development, challenges such as bureaucratic inefficiency, policy inconsistency, and regional disparities have hindered sustained progress. The study concludes with policy recommendations aimed at enhancing the federal government's role in fostering a more resilient and inclusive economic environment in Nigeria. These recommendations include monitoring the disbursement of loans on real growth enhancing capital projects instead of recurrent expenditure. Also, there is evident need to strengthen governance frameworks, improve on fiscal policy management with a focus on effective use of treasury instruments, deepen institutional reforms, addressing regional disparities, and fostering greater socio-political engagement to ensure sustainable economic growth and development.

Key words: Domestic characteristics, Economic revitalization, Gross Domestic Product, Treasury Bond, Treasury bills.

1. INTRODUCTION

Economic revitalization refers to measures taken to revive or stimulate economic growth¹². It can encompass both short-term measures such as cash-for-work programs, and longer-term efforts such as employment creation, productive investment, mitigation of business risks, and social inclusion (UN Peace Commission, 2010). Nigeria started off being prosperous only to experience economic downturn years after. Events such as political crises, civil war, ethnic and religious hostilities, natural disasters, corruption and mismanagement have been the major causes of negative growth witnessed in a country such as Nigeria that once had the unwavering potentials to attain growth and development. Overall, the economic transformation of Nigeria could be put into three phases: oil boom, 1973-1983; economic crisis, 1981- 1985; adjustment and post adjustment, 1986 to date. Suffice to say that during these phases Nigeria enjoyed some periods of economic growth but without development owing to pervasive inequalities, lack of will to shift in competitive advantage base on natural endowment to knowledge-based competitiveness, and poverty (Essien, 2001). According to Jaiyeola (2020), when Nigeria, gained independence in 1960, her GDP was \$4.20B and per capita income was \$93. At independence, Nigeria had a strong undiversified economy. To remedy the defect of this; it had to diversify its economy. So the Nigerian state invested an average of 6% of her annual GDP on education, with the intension to reduce the rate of illiteracy and ensure that the people gain requisite skills and human resources to drive the development of the new nation (Ohaegbulem & Chijioke, 2023). It also expanded roads and communication networks to allow for inroads into unchartered territories. But in order to create new employment opportunities, secondary industries and automobile plants were established. “It is worthy to note that the government funded most of these developments with foreign help, in forms of loans, from countries such as Britain and the United States. Agriculture accounted for over 75% of foreign exchange earnings, 68% of GDP, and created employment opportunities for about 65% of the population.

As oil exploration got profitable in the 70s, agriculture began to lose its prized position. By 1969, a period when the nation was just beginning to tilt towards oil dependency, the oil sector accounted for less than 3% of GDP and \$370 million in exports (42% of total exports); per capita income was \$130. Thus, diversifying into oil production led to the growth of an industrial sector from the early 1970s. This led to employment of foreign capital in the domestic production of goods which rippled into increased levels of industrialisation, employment, and economic growth” (Jaiyeola, 2020). Another relevant feature of the



Nigerian economy was a series of abrupt changes in the government's share of expenditures. As a percentage of Gross Domestic Product, national government expenditures rose from 9 percent in 1962 to 44 percent in 1979, but fell to 17 percent in 1988. The economic collapse in the late 1970s and early 1980s contributed to substantial fall in the GDP (Effoduh, 2015). The Structural Adjustment Program (SAP) in effect from 1986 to 1990, first mooted by the International Monetary Fund and carried out under the auspices of the World Bank, which emphasized privatization, market prices, and reduced government expenditures also led to low GDP in the 1980s. This program was based on the principle that, as GDP per capita falls; people demand relatively fewer social goods and relatively more private goods, which tend to be essential items such as food, clothing, and shelter. The programme did not benefit the poor. The significant question that may arise is whether economic revitalization can be achieved by domestic borrowing and which of the sources of funds available domestically would best work in stabilizing the economy? Thus, it is necessary to tackle the usefulness of domestic debts in revitalizing the economy. The household debt of Nigeria comprises the treasury bonds, development stock, promissory note, savings bond of the Federal Government of Nigeria (FGN), the green bond of FGN, and recently the FGN Sukuk (CBN, 2019). In the last five years, the debt increased at an alarming rate. In 2015 it stood at N8,837 billion (\$22.7995 Billion), it was N11,058.2 billion (\$28.5302 Billion) in 2016, N12,589.49 billion (\$32.4809 Billion) in 2017, N12,774.4 billion (\$32.9580 Billion) in 2018 and N14,272.64 billion (\$36.8234 Billion) in 2019 as at 2023, the total domestic debts stood at N59.12 trillion (US\$65.73) (NBS, 2024). Although, the debt consists of marketable securities which the holders can resale and also use as collateral, yet it does not make the nation free from debt. The government contracts more debt as the days go by (Nwoye, Udunwoke & Nworie, 2023; Okoye & Nwoye, 2021) without considering the impact on the future generation. Several reasons have been established as to why the Federal government of Nigeria did not achieve much using domestic funds to revitalize its economy especially in the 1990s. Most researchers have stressed that factors such as corruption, legitimacy of the government, rule of law, quality of regulations, the effectiveness of government, accountability, market size and infrastructure, among many others are the economic essentials that drive development (Yusuf, Mohd, & McMillan, 2021).

Economic revitalization is an essential part of economic growth. It can provide crucial dividends in the immediate aftermath of conflict and it is a necessary foundation for longer-term development. Without it, countries will struggle to achieve any meaningful development



in sectors of the society. It is simple to agree on the importance of economic revitalization but much harder to achieve it (Peacebuilding Support Office Department of Economic and Social Affairs United Nations, 2010). It is never a one-off event like elections, rather it is a marathon that involves getting all sectors to work almost at the same time. Economic revitalization require certain key reforms, including reconstructing core institutions (not just ministries or public services, but social systems too); rebuilding infrastructure; and reforming government policy, public administration and delivery of public services so as to create the enabling environment needed for economies to develop. In some cases special attention must be given to exploiting the potential benefits of natural resources or commodities as ways to fund reconstruction (Peacebuilding Support Office Department of Economic and Social Affairs United Nations, 2010). Any single one of these is difficult in a fragile and troubled economy; which is why Nigeria has been borrowing to fund most of her infrastructure needs (Yusuf, Mohd, & McMillan, 2021). Reasonable borrowings to finance public and infrastructure development are the key to faster economic growth. But excess borrowings without appropriate planning for investment may lead to heavy debt burden and interest payment, which in turn may create several undesirable effects for the economy (Joy & Panda, 2020). To service domestic debt, the government spent N1.76 trillion in 2020 as against a budget of N1.87 trillion (Yusuf, Mohd, & McMillan, 2021).

The justification for government borrowing has its foundation in the neoclassical growth models, which prescribes the need for capital scarce countries to borrow to increase their capital accumulation and steady-state level of output per capita (Madow et al., 2021). However, heavy cuts in the revenue of Nigeria has generated tension amongst policy makers, especially when financing governmental fiscal budgets across the federal entities – the federal, state, and local governments. This has resulted in revenue levelling through engagement of more domestic debt/borrowing rather than external debt/borrowing, partly due to its implications for the economy in the past (Okonjo-Iweala, Soludo, & Muhtar, 2002).

The primary objective of this study is to analyze the domestic characteristics of the Nigerian federal government from 1990 to 2023 and assess how these characteristics have influenced economic revitalization efforts during this period. Specifically, the study intends to:

1. assess the effect of Treasury bills on the economic growth of Nigeria being revitalized by the federal government.

2. determine the impact of Treasury Bonds on the GDP of Nigeria as a measure of economic growth.

Based on the above objectives, the following hypotheses were formulated to guide the research:

1. H_0 : Treasury bill has no significant effect on the economic growth of Nigeria
 H_1 : Treasury bill has significant effect on the economic growth of Nigeria
2. H_0 : Treasury Bonds has no significant effect on the GDP of Nigeria
 H_1 : Treasury Bonds has significant effect on the GDP of Nigeria

2.1 LITERATURE REVIEW

2.1.1 Domestic Debt

Oshandami (2006) defined domestic debt as debt instrument issued by the federal government and denominated in local currency. Apart from the federal government, states and local governments can issue debt instrument. Domestic debts can also be defined as debt stock issued in Nigeria on behalf of the Federal, state or local government in Nigeria. The Debt management Office (DMO) is charged with managing both external and the domestic public debts in Nigeria. Nigeria's total domestic debt total stood at N55.93 trillion (US\$72.76 billion) as at Q3 2023. Lagos state recorded the highest domestic debt with N960.50 billion, followed by Delta with N371.49 billion as at Q3 2023. Jigawa state recorded the lowest domestic debt with N42.89 billion, followed by Kebbi state with N60.88 billion (NBS, 2023). Despite the expected economic growth as a result of domestic loans, studies have, however, established that it has adversely affected the economy resulting in high budget, low output growth, large expenditure growth, inflation rate and record debt crises, among others (Ude & Ekesiobi, 2014; Igbodika, Jessie & Andabai, 2016).

2.1.2 Domestic Debt Instruments

Governments at different levels use various instruments to raise funds to meet its present and future obligations. Some of the instruments are traded in the money market while others are traded in the capital market. Agbada and Odejimi (2015) investigated the effect of money market development on economic growth in Nigeria and the result of the regression technique revealed strong linear relationship money market and economic growth. These instruments have some unique and similar features which include, the maturity date (short term, medium term, long term), the interest rate (fixed or variable) and the application of

each debt instrument (Akinadewo, 2023). The instruments of domestic debt in Nigeria comprises of Federal Government Bonds (FGBs), Nigerian Treasury Bills (NTBs), Treasury Bonds, Development Stocks (DS), Promissory Note, Sukuk, and Savings Bonds among others (DMO, 2018).

2.1.2.1 Treasury Bills

Treasury Bills, also known as T-Bills, are government-backed, short-term securities issued by the CBN. They are issued when the government needs to borrow funds for a short period of time. They have a maximum maturity of 364 days. T-Bills are sold at a discount from their face value. Although similar to a short-term bond, t-bills are different and offer low yields compared to high-risk investments. Treasury Bills are sold through a bi-weekly auction by the CBN. Buyers quote bids and the average minimum bid is selected. The Government sells these bills at a lower price (lower than face value). Next, the investor holds on to the T-Bills until the maturity date, and eventually, is paid the full price of the face value. The maturity period of a T-bill plays an important role in its price. A bill of one year will yield more profit than that of three months. Hence, investors have a higher rate of return to compensate for keeping their money for a longer time. According to George-Anokwuru, (2023), the introduction of Treasury Bills grew out of the need to match economic agents with surplus funds, with those in need of funds temporarily. Treasury bills guarantee economic units the ability to invest more than they save, either by reducing their money balances, by selling financial assets, or by increasing their financial obligations (Ezirim, 2005).

2.1.2.2 Treasury Certificates

Treasury certificates are medium-term government securities which have a maturity of one to two years. It functions as link between treasury bills (short-term instruments) and long-term government stocks. Treasury certificates, which were first issued in 1968, constituted one of the largest securities between 1983 and 1988. It even surpassed treasury bills between the period 1976-1980. It was first issued to further deepen the domestic money market by increasing short-term investment options available (Asogwa & Ezema, 2005). Treasury certificates are similar to treasury bills in all admirations, except that the tenure is different. Both instruments are qualified for rediscount at the money market. According to Opara, Nzotta and Kanu (2021), treasury certificates have played a key role in the growth of the money market in Nigeria. The instrument has also helped government in meeting its financial necessities, especially during the civil war years and the rebuilding period of the 1970's.

Additional issues were suspended in 1975 due to excess liquidity in the system caused by the oil boom. The Treasury certificates were again announced in 1976 as a result of pressure on government finances.

2.1.2.3 Federal Government Bonds

A bond is a type of borrowing agreement that binds a lender (investor) and a borrower (issuer), giving the former a claim on periodic streams of income transmitted by the borrower. Bonds are classified as fixed-income securities because they commit to a series of set payments to the security holder on predetermined dates, often using a specific calculation process (Bodie, Kane & Marcus, 2014). FGN Bonds are debt securities (liabilities) of the Federal Government of Nigeria (FGN) issued by the Debt Management Office (DMO) for and on behalf of the Federal Government. The FGN has an obligation to pay the bondholder the principal and agreed interest as and when due. Buying the FGN Bonds, means one is lending to the Federal Government of Nigeria for a specified period of time. FGN bonds accounted for 86.0% of the Nigerian bond market, with states accounting for 10.6% and corporations accounting for 3.4% (Okeke-Chidi, et al., 2020). The FGN Bonds are considered as the safest of all investments in domestic debt market because it is backed by the ‘full faith and credit’ of the Federal Government, and as such it is classified as a risk free debt instrument. These have no default risk, meaning that it is absolutely certain interest and principal will be paid as and when due. The interests income earned from the securities are tax exempt.

The FGN bond instruments are not eligible to be traded at the money market and cannot serve as an instrument for open market processes. The main objective of treasury bonds is to provide a cost effective source of deficit financing for the government and seek to minimize debt service obligations in government debts prompted by the high level of deficit financing by the government (Nzotta, 2004). Bonds are bought in the primary and secondary markets by brokers or market makers. In the primary market, when a government issues bonds, it does so through FGN Bonds Auctions in the Primary Debt Market. This auction is held monthly by a debt management agency known as the Debt Management Office (DMO) and Primary Dealer Market Makers (PDMMs), who are banks selected by the DMO to operate as authorized dealers in FGN bonds. At the auctions, PDMMs place bids for themselves as well as their clients. Investors interested in purchasing government instruments can do so in the secondary debt market, also known as the over-the-counter (OTC) market, where trading is done daily

by licensed broker-dealers (banks and stockbrokers) on the floor of The Nigeria Securities Exchange (NSE) and on FMDQ OTC Securities Exchange (DLM capital group, 2023).

2.1.2.4 Development Stock

Development Stock: This is fairly a long-term debt instruments sponsored by the CBN on behalf of the federal government. They have stable rates of return and well-defined maturity. In an effort to advance the liquidity and profitability of banks, the central bank classified government development stocks of less than 3 years of maturity as qualified liquid assets for the purpose of calculating the liquidity of banks. This move further widened the scope of activities in the money market (Nzotta, 2004). Maturity structure of domestic debt depends on the composition of domestic debt stock (Garba 2023).

2.1.2.5 Promissory Notes

A promissory note is a debt instrument in which the issuer promises to pay the creditor a specific amount at a future date agreed by parties. The federal government of Nigeria can raise domestic public loans by means of the Government Promissory Notes Act 1960 No. 6. The Federal Executive Council (FEC) had in April 2019 approved the establishment of a promissory note programme worth N3.4 trillion for the settlement of inherited local debts and contractual obligations of the federal government. The promissory notes enable the federal government to formally recognise and account for its true liabilities in line with the International Public Sector Accounting Standards (IPSAS) (Unini, 2020). According to the DMO, all the promissory notes have maturity dates between 2019 and 2024. DMO's data revealed that state governments received a total of N484.852 billion; while federal agencies received N68.796 billion.

2.1.3 Nigeria Economic Revitalization plans 1990-2023

Nigeria, with an estimated population of over 206.5 million people according to United Nations data is ranked as the country with the highest population in Africa and the 7th in the world. Nigeria, despite being blessed with enormous resources, faces a plethora of socio-economic issues. These issues are often attributed to inefficient management of the economy and public finances by successive governments (Edeminam, 2021). At the fore of issues is debt management. Debt is pertinent to economic growth and national development because it provides immediate bulk cash necessary for capital-intensive projects, the costs of such projects will tighten the fiscal space in the economy if sourced from government coffers

(Didia & Ayokunle 2020, Edeminam, 2021). The Nigerian government (Federal and states) have always relied on borrowing to finance developmental projects and in recent times borrow to stabilize the economy as a result of dwindling revenue according to the Federal ministry of finance. Nigeria is currently ranked among Sub-Saharan Africa heavily indebted countries with a stunted GDP growth rate, retarded export growth rate, a fast dwindling income per capita and an increasing poverty level. Most of these countries, Nigeria inclusive, have been trapped by hasty and distress borrowing which they are often unable to service (Yusuf, Mohd, & McMillan, 2021). According to the National Bureau of Statistics (NBS) 2019 Poverty and Inequality in Nigeria report, indicated that 40.1% of the total population, or almost 83 million people, live below the country's poverty line of N137,430 (\$381.75) per year, highlighting the low levels of wealth in a country that has Africa's biggest economy. This is despite increased domestic borrowing.

2.2 Theoretical Review

2.2.1 Debt Overhang Theory

The debt overhang hypothesis was first proposed by Stewart C. Myers in 1977. Debt overhang is when an organization (or government/family) incurs debt at such a high rate that they incur too much debt and are unable to fund future projects. In other words, an organization accumulates so much debt that lenders do not want to give them more money. This implies that large borrowing leads to high debt, debt traps and slow down of economic growth. According to the debt overhang hypothesis, if there exists the likelihood that in the future government debt will be larger than the country's repayment ability, expected debt service costs will discourage further domestic and foreign investment. High debt burden encourages capital flight through creating risks of devaluation, increases in taxation and thus the desire to protect the real value of financial assets. Capital flight in turn reduces domestic savings and investment, thus reducing growth, the tax base and debt servicing capacity. The diversion of foreign exchange to debt servicing also limits import capacity, competitiveness, and investment and thus growth (Madow et al., 2021).

2.3. Empirical Review

The nexus between economic revitalization and domestic finance has been the subject of several empirical studies with mixed results. Findings from these studies tend to suggest that while domestic debts increased economic growth increased but the percentage increase of debt to economic growth vary. In the course of this study, available literatures showed that

studies on domestic debts in relation to economic development have been relatively revealing for Nigeria.

Opara, Nzotta, and Kanu (2021) in their study investigated the effects of Nigeria's Domestic Public Debts and Economic Development. The study made use of Ordinary Least Square Regression tools to determine the statistical relationship between Nigeria's domestic public debt profile and Human Development Index as well as private sector investment. The outcome of study in the first model showed that domestic debt servicing and state governments' domestic debts are significantly related to economic development.

Ayuba and Khan, (2019) examined the long-run relationship between domestic debt and the fiscal policy of economic growth in Nigeria in the period from 1981 to 2013. The study focused on the GDP, Total government revenue, total government expenditure, government domestic debts and government saving for the period. They used the autoregressive distributed lag (ARDL) approach and the bounds test to analyse the data. The results revealed that although overall the adverse negative domestic debt hurts the economy, it has a positive effect on the total aggregate government revenue and economic growth in Nigeria in the research period.

On the other hand. Egbetunde (2012) using the vector autoregressive method and annual data from 1970 to 2010, analysed the causal nexus between public debt and economic growth in Nigeria. The findings of the VAR model revealed that there exists a bi-directional causality between disaggregated components of public debt and economic growth in Nigeria. The study was based on data whose results may have been overtaken by recent development in government debt position and did not include any control variables.

Elom-Obed et al. (2017) using the Vector Error Correction Model (VECM) and annual data from 1980 to 2015, analysed the relationship between public debt and economic growth in Nigeria. The variables used in the study included RGDP, foreign debt, domestic debt, and domestic private savings. The study findings revealed a significant negative impact of foreign and domestic debt on economic growth in Nigeria. The study suffered from significant variable omission bias and adopted an inadequate estimation technique that cannot generate reliable coefficient estimates about the study variables.

Akhanolu et al. (2018) examined the effect of public debt on economic growth of Nigeria using annual data from 1982 to 2017 and two-stage least square regression technique. The study modeled GDP as a function of internal debt, external debt, savings and capital expenditure. The results revealed that external debt had a significant negative impact on growth while internal debt showed a positive impact. However, the study suffered from significant variable omission bias and the methodology used was inadequate in accounting for complex relationship between the study variables.

Didia and Ayokunle, (2020) examined the impact of public and publicly guaranteed debt on the economic growth of Nigeria. The study disaggregated total public and publicly guaranteed debt into external debt and domestic debt, and examined whether the two kinds of debt have differential impact on economic growth in Nigeria. Utilizing data from the Central Bank of Nigeria, and the World Bank and empirical analysis using the Vector Error Correction Model (VECM) and covering 1980 – 2016, revealed that domestic debt has a statistically significant positive relationship with economic growth in the long run.

Udoh et al. (2020) used quarterly data from 2006 to 2018 to explore the influence of intergenerational debt burden on economic prosperity in Nigeria. The variables include GDP, Social and community measures of government capital expenditure on human capital development, M3 money supply measures. The hypothesis was tested with the ARDL model to estimate the long and short-term cause- effect relationship. The findings reveal that borrowed funds are habitually used in Nigeria to pay salaries and allowances, resulting in debt overhang and intergenerational debt burden. Using OLS regression techniques and the time series data from 1986 – 2005, the study explored the relationship between domestic debt and economic growth in Nigeria.

Omimakinde and Onifade (2022) examined the relationship between domestic debt and economic growth in Nigeria. The results revealed that domestic debt does not have significant impact on economic growth in the short run but significant negative impact in the long-run. The study adopted the Autoregressive Distributed Lag (ARDL), a variant of the vector autoregressive with variables such as GDP, domestic debts, lending rate, foreign used in the analysis.



Ayuba and Mohd Khan (2019) in their study examined the long-run relationship between domestic debt and the fiscal policy of economic growth in Nigeria in the period from 1981 to 2013. The study employed the autoregressive distributed lag (ARDL) approach and the bounds test as proposed by Narayan (2005), anchored on the perspective of the endogenous growth theory. The results revealed that although the adverse effect of domestic debt hurts the economy, it has a positive effect on the total aggregate government revenue and economic growth in Nigeria in the research period.

In differing from most empirical studies previously conducted for the Nigerian economy, the current study contributed to the literature in three ways. Firstly, the current study focuses specifically on domestic debt characteristics whereas some previous studies have been on national debt (domestic and external). This is significant since the national debt studies tend to generalize the findings from both debts characteristics. Secondly, most empirical studies on related topics were more engrossed with investigating the impact of external debt (Pattillo et al., 2004; Udeh et al., 2016; Kharusi & Ada, 2018; Kengdo et al., 2020) on economic growth in emerging economies. Thus, conducting a study on only external debts or national debts which may not give an accurate picture of the complex relationship that exists between domestic public debt and economic revitalization in Nigeria as external debt constitutes large a portion of government debt stock. Besides, most of the Nigerian empirical studies reviewed, haphazardly selected their target and control variables in modelling the relationship between government debt and economic growth thereby failing to account for some important variables suggested in the literature. The current study incorporated only domestic government debt and growth-related variables in its empirical model to overcome variable omission bias and guide against the identified gap in variables used from previous studies. This study thus, conducted a multivariate analysis of the nexus between government domestic debt indicators and economic revitalization in Nigeria that will assist in recommending whether domestic debt or external debt helps to stimulate greater level of investment and economic activities in Nigeria. Furthermore, the study uses a relatively longer and high frequency data spanning 39 years than those used in many previous studies. The importance of a longer time series data set in any co-integration analysis cannot be over-emphasized. Also, relying on the findings, this study proffers valuable, pertinent, and practical recommendations for improved policy formulation.

3. METHODOLOGY

This study adopted the quantitative method and ex post facto research design using already existing data to provide empirical answers to the research problems. Ex post facto research designs help provide answers to the questions about who, what, when, where and how connected with a research problem. It cannot conclusively establish answers to the why problems associated with a research. It is used to generate information on the current state of the phenomenon and to explain what exists with respect to variables Joy & Panda, (2020). The study focuses on the domestic debt characteristics in Nigeria from 1990 to 2023.

The data used in this study were gathered from secondary sources. These data collected from Central Bank of Nigeria (CBN), the Debt Management Office (DMO), Ministry of Finance and National Bureau of Statistics database for various years. The macroeconomic variables on which data were collected included the Real Gross Domestic Product (RGDP), Domestic Debt Stock (DDS) like Treasury bills and FGN bonds. Considering the limitations of data availability, all variables cover a period of 33 years from 1990 to 2023 making a total of 189 observations. All variables were taken on an annual basis in nominal terms and in rates as obtained from their different sources. Secondary data were selected as these data had already been published. However, there was no doubt envisaged about the reliability of the secondary data used, but the possibility of random errors has not been overlooked.

4. RESULT AND DISCUSSIONS

Table 1: Descriptive statistics

	NGDP	TBILL	TBOND
Mean	0.199310	3.707573	33.83852
Median	0.154268	4.174521	32.69231
Maximum	0.821136	35.22408	79.12621
Minimum	0.001737	-50.24807	2.463054
Std. Dev.	0.163167	5.222800	18.62541
Skewness	1.040659	-1.718634	0.401854
Kurtosis	3.583222	19.32947	2.282941
Jarque-Bera	264.9431	15686.93	48.67668
Probability	0.000000	0.000000	0.000000
Sum	271.2609	5012.638	34075.39
Sum Sq. Dev.	36.20802	36852.10	348987.3

Observations	33	33	33
--------------	----	----	----

Source: Estimated by Researcher, 2024

For robust empirical analysis, it is imperative to check the descriptive statistics before analyzing the data series in order to observe the variable variability and distribution. 4.1 shows the measures of central tendency mean and median that gives the estimates of the centre of the distribution. In Table 1, it was observed that the nominal GDP (NGDP, 0.199310) mean value of the Nigeria is the lowest among the variables. It was also observed that the Treasury bill (TBILL, 0.355667) is also low, making a suggestive link between the two variables. It is also evident that the median values of the variables did not deviated from the mean values, each of the value were not more than 2 units apart from the mean. It can be observed that the mean and median of Treasury bond (TBOND, 33.83852) is much difference from treasury bill, which denotes a non-symmetric distribution and the existence of high variability. Also observed from the table4 are positively skewed of the data. Lastly, the Jarque-Bera statistic exceeds 0.05% level of significance for all the series. This is an indication that the null hypothesis of normal distribution for the series is rejected at this significance level. The absence of normal distribution may be attributed to few data used for the analysis and heterogeneous nature of the data used in this study. Such heterogeneities are usually corrected during estimation in in ARDL data analysis.

Table 2: Correlation Matrix

	NGDP	TBOND	TBILL
NGDP	1.000000		
TBOND	-0.316902	1.000000	
TBILL	0.051458	-0.234872	1.000000

Source: Estimated by Researcher, 2024

From Table 2, nominal gross development (NGDP) show negative relationships to Treasury bond (TBILL) while positive relationships Treasury bond (TBOND). It could be observed that there are none of the variables that above 0.50, which signify no strong linear relationships among the variable. There is a weak and negative correlation among the variables with negative value and vice versa.

4.1.1 Unit root tests

The inferential estimation among the variables requires that the stationary of the time series properties are checked. This was done in order to correctly apply appropriate panel regression technique which is most suitable for purely I(0) and purely I(1) variables and not for I(2) variables (Pesaran, Shin & Smith, 2001). In other words, panel unit root tests such as Levin, Lin and Chu (2002) (LLC), Im, Pesaran and Shin (2003) (IPS), Augmented Dickey Fuller (ADF, 1979) and Phillip-Perron (PP, 1988) tests were performed. All the variable are of order I(0) and I(1) as shown in appendix A.

Table 3: Unit root (ADF)

Variable	Adf test at levels	5% critical value at level	Adf test (first diff)	5% critical value (first diff)	Order of integration	Remarks
NGDP	(-13.42503)	(-2.954021)			I(0)	Stationary
TBILL	(3.620382)	(-2.986225)			I(0)	Stationary
TBOND	(-1.227564)	(-2.976263)	(-6.714708)	(-2.960411)	I(1)	Stationary

Source: Researcher's compilations, 2023 using EView 12

Decision Rule: Reject H_0 if ADF test if absolute value is greater than 5% critical value, otherwise accept. From the above results in table 4.3 the nominal GDP, and Treasury bill are greater than their 5% critical value at level I(0) as indicated in Table 4.3 while Treasury bond is greater than their 5% critical value at first difference level I(1). These unit roots results reveal that the variable have mix order integration of I(0) and I(1). In such context, the ARDL bounds test approach is suitable to examine if there are long run relationship among the variables.

4.1.2 Test for Co-integration

Given that the series are integrated of order zero and one that is I(0) and I(1), auto redistributed lag co-integration approach is found most appropriate in ascertaining if there is a long run relationship existing between the variables of the model. The theory of co-integration, was pioneered by Granger (1981), Engle and Granger (1987), addresses this issue of integrating short-run dynamics with Long-run equilibrium. This study makes use of ARDL bound test approach developed by Pesaran et al (2001) to evaluate if there is a co-integration among the variables. Null hypothesis to be tested (H_0): there is no co-integration among the variables.

4.1.3 ARDL Bound Co-integration Test Result

Table 4: ARDL Bounds Test

F-Statistics = 4.619262		
Critical Value Bounds		
Significance levels	I(0) Bounds	I(1) Bounds
5%	2.62	3.79

Source: Researcher's compilations, 2024.

The co-integrating was evaluated through ARDL Bounds Test. The result as shown in Table 4 indicated that the F-Statistics value (4.619262) is greater than the lower and upper critical bounds at 5% significant value. This result indicates an evidence of co-integration among the variables. The conclusion from the result is rejection of null hypothesis of no co-integration. Since the variables are co-integrated, we estimate the long run consumption function and the short run dynamic using ARDL technique as suggested by Stock and Watson (1993).

4.1.4 Long Run and Error Correction Model

Since the bounds test indicated the presence of long run relations among the variables, we then go further to estimate the long run model to ascertain the coefficients of the variables. The long run dynamic as presented in Table 5 below:

Table 5: Long Run Model

Dependent Variable: Nominal Gross Domestic Product (NGDP)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
NGDP(-1)	1.148570	0.036598	31.38305	0.0000
TBILL	0.373969	1.992702	0.187669	0.8527
TBILL(-1)	0.878151	2.758211	0.318377	0.7528
TBILL(-2)	-3.053597	1.978550	-1.543351	0.1353
TBOND	4.734104	4.176414	1.133533	0.2677
C	-191.5591	1526.373	-0.125499	0.9011
R ²	= Adj.R ² =	F-stat=	Prob(F-stat)	D.W=
0.998210	0.997852	2788.240	= 000000	2.172950

Source: Researcher's compilations, 2024.

Table 5 reveals the long-run relationship of nominal gross domestic product and all the explanatory variables; Treasury bill and Treasury bond the details are discussed section below.

4.2 Test of Hypotheses

The research hypotheses were evaluated based on already defined criteria of statistical, econometric and prior expectations.

(a) R² and Adjusted R²

The R² = 0.998210 indicates that the independent variables explains the dependent variable up to 99%, meaning that about 99% of the variation in nominal GDP is explained by Tbill and Tbond. The remaining 0.001% is explained by variable not included in this model. The adjusted R² is reported as the multiple coefficient of determination adjusted to take into account the degrees of freedom associated with the sum of squares. The Adjusted R² result is 0.997852. This implies that about 99% of the fluctuations in the dependent variable (NGDP) are jointly explained by the fluctuations in the explanatory variables (Tbill and Tbond). F-stat. = 2788.240, Prob. F-stat = 0.00000 shows that the variable are collectively significant. The Dubin Wastin, D.W= 2.172950 indicates that there is no problem of autocorrelation between the variables since the coefficient is 2.

(b) F-Statistic Test

The table below summarizes the significance of the overall regression

Table 6: Summary of the F-Statistics Test

F-statistics	F _{0.05} (2,18)	Decision	Rule	Conclusion
F-stat.= 2788.240	3.4928	F _{cal} >F _{tab} .	Reject H ₀	Statistically Significant

Source: Researcher's compilations, 2024.

Since F_{cal} = 2788.240 is greater than the F_{0.05} (2, 18) = 3.4928, we reject H₀. Thus, we conclude that the slope coefficients are not simultaneously equal to zero; hence, there is a joint significance of the variables used in the model, which implies that there is a strong relationship between the regressand (NGDP) and the regressors (Tbill and Tbond).

The table below summarizes the statistical significance of each of the variables at 5% level.

Table 7: Summary of the t-test

Variable(s)	t-statistic	Critical-Value	Decision Rule	Conclusion
NGDP(-1)	31.38305	2.04	Reject H ₀	Statistically significant
TBILL	0.187669	2.04	Accept H ₀	Statistically Insignificant
TBILL(-1)	0.318377	2.04	Accept H ₀	Statistically Insignificant
TBILL(-2)	-1.543351	2.04	Accept H ₀	Statistically Insignificant
TBOND	1.133533	2.04	Accept H ₀	Statistically Insignificant
C	-0.125499	204	Accept H ₀	Statistically Insignificant

Source: Researcher's compilations, 2024

From the results displayed in the table 7 above, shows that none of the variables are statistical significant except the previous year GDP, hence Tbill and Tbond are all statistically insignificant at 5% level meaning that none of the variable except last year nominal GDP can significantly explain the change in in current nominal GDP of Nigeria. The nominal GDP of the previous year, NGDP-1 (1.148570) is positively related to current nominal GDP in the long, and it is significant (0.0000). Given a percentage (1%) increase in previous nominal GDP in Nigeria, current nominal GDP will increase by 114.8% in the long-run. The result was in alliance with the finding of Ayuba and Mohd Khan (2019) study on the nexus between domestic debt and economic growth in Nigeria GDP and private domestic consumption in Nigeria 1981-2013. Their findings were also positive and insignificant relationship between Tbill, Tbonds and GDP in Nigeria. It is also in tandem with the results of Omimakinde and Onifade (2022). They discovered that that domestic debt does not have significant impact on economic growth in the short run but significant negative impact in the long-run.

4.2.1 Hypothesis One

1. Ho: Treasury bill has no significant effect on the economic growth of Nigeria

Hi: Treasury bill has significant effect on the economic growth of Nigeria

From Table 7 Treasury bill (Tbill) shows that coefficients were positively related to nominal GDP to the second year, thereafter it become negative, on lag 3. This implies that if Treasury bill is used for the economic growth, it will only been efficient and effective only for two years, thereafter it will become detrimental to the economy. The relationship as shown from Table 7 indicates that nominal GDP will increase in the current year by 37.4%, in the second year by 87.8% and lowers nominal GDP by 305.4%. However, the coefficient of the Treasury

bill are insignificant (0.8527, 0.7528, and 0.1353) respectively, indicating that none of them individually can cause a significant increase or decrease in the nominal GDP. This result is in conformity the findings of Omimakinde & Onifade (2022) that domestic debt was to be significantly negative to growth both in the short-run and in the long-run. Though it was found that the direction of its' impact on growth appeared mixed.

4.2.2 Hypothesis Two

Ho: Treasury Bonds has no significant effect on the GDP of Nigeria

Hi: Treasury Bonds has significant effect on the GDP of Nigeria

The Treasury bond coefficient of 4.734104 with an insignificant value of 0.2677, implies that there is a positive relationship in long run between Treasury bond and nominal GDP in Nigeria. A percentage (1%) increase in Treasury bond will lead to an increase of 473.4% of the nominal GDP in the long run. This finding resonates with the conclusion reached by Zubair (2021) that there is a significant positive relationship between governments bonds and economic growth and development of Nigeria (GDP) during the period 1998-2011.

CONCLUSION AND RECOMMENDATIONS

Consistent with the findings from the analysis conducted and the hypothesis, the paper concludes that there is no significant positive relationship between Treasury bonds and economic growth in Nigeria during the period 1990-2023. It was also established that there is co-integration between gross domestic product growth rate & Treasury bills in Nigeria. The results show that there is a long-run equilibrium among treasury bills and economic growth in the models having established the existence of the long run relationship for Nigerian situation. Thus, treasury bill does not have significant impact in the short-run while domestic debt in the long run Domestic debt contributes to the decline in Nigerian economic growth as its contribution to the GDP is significantly negative. The paper concludes that federal government bonds have significantly improved the economic growth and development (GDP) on one hand, but did not reduce the unemployment problems in Nigeria. Moreover, governments in Nigeria should make use of the funds generated from the bonds issue in employment generation across the country.

It is therefore recommended that government should reduce the level of domestic debt it accumulates overtime to prevent debt overhang. Also, government should as a matter of urgency monitor the disbursement of loans on real growth enhancing capital projects instead

of recurrent expenditure. Government should formulate policies aimed at encouraging domestic savings vis-à-vis domestic investment.

REFERENCES

- Abayomi A. & Farayola P., (2021). A mathematical modelling of economic restoration through agricultural revitalization in Nigeria. *Journal of Quality Measurement and Analysis JQMA 17(1) 2021, 79-91 e-ISSN:2600-8602*. <http://www.ukm.my/jqma>
- Adetokunbo, A.M., & Ebere, C.E. (2019). Determinants and analysis of domestic debt in Nigeria:1970-2015. *Acta Universitatis Danubius, 15(2), 275-287*.
- Akinadewo, I., (2023). Appraisal of domestic debt instruments in Nigeria (2009-2018): Evidence from debt management office (dmo) 5(2):1-11
- Ari, I., & Koc, M. (2018). Sustainable financing for sustainable development: Understanding the Interrelations between public investment and sovereign debt. *Sustainability, 10(3901), 1-25*.
- Asogwa R. C., & Ezema C. C., (2005). Domestic Government Debt Structure, Risk Characteristics and Monetary Policy Conduct: Evidence from Nigeria. Final Research Report Submitted for the International Research Project on Macroeconomic Policy Challenges for Low Income Countries.
- Ayuba, I.K., & Khan, S.M. (2019). Domestic debt and economic growth in Nigeria: An ARDL Bounds test approach. *Economics and Business, 33(1), 50-68*.
- Bodie, Z., Kane, A. & Marcus, A. (2014). Investments. McGraw-Hill Education. ISBN10: 1264151306 / ISBN13: 9781264151301
- Burhanudin, M.D., Muda, R., Nathan, S.B., & Arshad, R. (2017). Real effects of government debt *On sustainable economic growth in Malaysia. Journal of International Studies, 10(3), 161-172*.
- Central Bank of Nigeria (2019). Statistical bulletin, 30, December 2019. [2019 Statistical Bulletin Explanatory Notes e Copy.pdf \(cbn.gov.ng\)](#)
- Debt Management Office (2018). Sovereign Sukuk, N100 Billion Investment Trust Certificates. <https://www.dmo.gov.ng/fgn-bonds/sovereign-sukuk/2403-using-sukuk-to-finance-infrastructure-dmo-inspects-roads-financed-by-sukuk/file>.
- Didia, D., & Ayokunle, P. (2020). External debt, domestic debt and economic growth: The case of Nigeria. *Advances in Economics and Business 8(2), 85-94. Economics Online*.
- Edeminam V. B., (2021). Impact of Public Debt on Economic Growth in Nigeria (1990 to 2019). *Advances in Economics and Business 9(1), 1-10, 2021*. <http://www.hrpub.org>
DOI: 10.13189/aeb.2021.090101

- Effoduh, J. O., (2015). The Economic Development of Nigeria from 1914 to 2014. Council on African Security and Development. Retrieved from <https://casade.org/academic-papers/economic-development-nigeria-1914-2014/>
- Essien, A. (2001). Nigeria's economic growth: performance and determinants. *CBN Economic & Financial review*, 400(3).
<http://www.library.cbn.gov.ng:8092/jspui/bitstream/123456789/391/1/Nigeria%27s%20economic%20growth%20performance%20and%20determinants.pdf>
- Ezirim, C. B. (2005). Finance Dynamics: Principles, Techniques and Application 3rd Edition. *Markowitz Centre for Research and Development University of Port Harcourt*.
- Garba A. (2023). The federal domestic debt in Nigeria: structure and growth,1970-95.1
<https://www.researchgate.net/publication/376713826>
- George-Anokwuru C. C., (2023). Treasury bills and economic growth in Nigeria: *International Journal of Economics, Commerce & Management United Kingdom*, 11(4). Available at: <https://ijecm.co.uk/>
- Grimsley, S. (2016). What is sustainable economic growth - Definition & Overview. Retrieved On August 1, 2020 from: <https://study.com/academy/lesson/what-is-sustainable-economic-growth-definition-lesson> quiz.html.
- Haffiner, O.C., Aruna, A.J., & Adams, K. (2017). Impact of domestic debt on economic growth in Sierra Leone: An empirical investigation. *West African Journal of Monetary and Economic Integration*, 17(2), 1-24.
- Igbodika, M.N., Jessie, I.C., & Andabai, P.W. (2016). Domestic debt and the performance of Nigerian economy (1987-2014): *An empirical investigation. European Journal of Research And Reflection in Management Sciences*, 4(3), 34-42.
- Jaiyeola, T., (2020). A Brief on Nigeria's Economic Journey From 1960. Ominira Initiative. <https://ominirainitiative.org/a-brief-on-nigerias-economic-journey-from-1960/>
- Joy, J., & Panda, P. K. (2020). Pattern of public debt and debt overhang among BRICS nations: An empirical analysis. *Journal of Financial Economic Policy*, 12(3), 345–363. <https://doi.org/10.1108/JFEP-01-2019-0021>
- Krugman, P. (1988). Financing versus forgiving a debt overhang. *NBER working Paper 2486*. Available online at: www.nber.org/papers/2486.
- Kueh, J., Liew, V.K., & Yong, S. (2017). Modelling Malaysia debt threshold: Debt composition Perspective. *International Journal of Business and Society*, 18(4), 800-807.



- Madow, N., Nimonka, B., Brigitte, K. K., & Camarero, M. (2021). On the robust drivers of public debt in Africa: Fresh evidence from Bayesian model averaging approach. *Cogent Economics & Finance*, *9*(1), 1860282. <https://doi.org/10.1080/23322039.2020.1860282>
- Mbate, M. (2014). Domestic debt, private sector and economic growth in Sub-Saharan Africa. *African Development Review*, *25*(4), 434-446.
- Narayan, P.K. (2005). The saving and investment nexus for China: Evidence from co-integration Test. *Applied Economics*, *37*(17), 1979-1990.
- National Bureau of Statistics (2024). Nigerian Domestic & Foreign Debt Q4-2023. Retrieved from <https://nigerianstat.gov.ng/pdfuploads/DEBT%20Q4%202023.pdf>
- Nwoye, U.J., Udunwoke, C.M. & Nworie, G.O. (2023). Effect of Debt Level on the Economic Performance of Nigeria from 1999 to 2021, *Journal of Global Accounting*, *9*(1), 214 - 247.
- Ohaegbulem E.U., & Chijioke S.C. (2023) On Nigeria's Budgetary Allocations to The Education Sector (1960-2023) In View of UNESCO'S Benchmarks, *International Journal of Mathematics and Statistics Studies*, *11*(4),32-44.
- Okeke-Chidi, C.N., Ogbonna, K.S., Okeke, I.J., & Chris-Ejiogu, U.G. (2020) Bond Market and Economic Development in Nigeria. *International Journal of Maritime and Multidisciplinary Research- Maiden Edition*.177-187.
- Okolo, Ndidi & Okolie, Anthony. (2021). Revitalizing Urban Public Spaces in Nigeria through Vegetative Enclaves. 1. 124-130.
- Okoye, E.I. & Nwoye, U.J. (2021). Evaluating Governance Practices and Business Operations in Nigeria: Attendant Response to Fraud Prevention and Risk Management in the COVID-19 Pandemic Era, *UNIZIK Journal of Business*, *4*(2), 56 – 75. DOI: 10.36108/unizikjb/1202.40.0270
- Okwu, A.T., Obiwuru, T.C., Obiakor, R.T., & Oluwalaiye, O.B. (2016). Domestic debt and Economic growth in Nigeria: Data-based Evidence. *Greener Journal of Economics and Accountancy*, *5*(1), 1-12.
- Oluwadare J. O (2021) Strategies for Transforming Oil and Gas Sector for Economic Growth and Environmental Sustainability in Nigeria September 2021 DOI:10.37591/JoAEST (PDF)
- Omimakinde A. J., & Onifade Z. S., (2022). Relationship between Domestic Debt and Economic Growth of Nigeria. *International Journal of Social Science And Human Research* ISSN(print): 2644-0679, ISSN(online): 2644-0695 Volume 05 Issue 06 June 2022 DOI: 10.47191/ijsshr/v5-i6-19, Impact factor- 5.871 Page No: 2153-2159



- Omodero, C.O., Ekwe, M.C., & Ihendinihu, J.U. (2018). Derivation funds management and economic development of Nigeria: Evidence from Niger Delta States of Nigeria. *International Journal of Financial Research*, 9(2), 165-171.
- Omodero, C.O., Egbide, B., Madugba, J.U., & Ehikioya, B.I. (2020). A Mismatch between External Debt Finances and Consumption Cost in Nigeria. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(58),1-13.
- Oshandami (2006). The Impact of Domestic Debt on Nigeria's Economic Growth. Unpublished B.Sc Project. Department of Economics, Kogi State University, Anyigba
- Opara I. V. Nzotta S. M. and Kanu S. I., (2021) Nigeria's Domestic Public Debts and Economic Development
https://www.researchgate.net/publication/353758735_Nigeria%27s_Domestic_Public_Debts_and_Economic_Development
- Peacebuilding Support Office Department of Economic and Social Affairs United Nations, (2010). Peacebuilding Commission Working Group on Lessons Learned. Retrieved from https://www.un.org/peacebuilding/sites/www.un.org.peacebuilding/files/documents/Des_a_pbso_background_paper.pdf
- Richard, S., Kurayish, S., & Enoch, T. (2020). Uganda's experience with debt and economic Growth: an empirical analysis of the effect of public debt on economic growth – 1980-2016. *Journal of Economic Structures*, 9(48), 1-18.
- Saifuddin, M. (2016). Public debt and economic growth: Evidence from Bangladesh. *Global Journal of Management and Business Research: B Economics and Commerce*, 16(5), 65-73.
- Saungweme, T., & Odhiambo, N.M. (2020). The impact of domestic and foreign public debt on Economic growth: Empirical evidence from Zimbabwe. *International Economics*, 73(1), 77-106
- Sodeeq A. M., (2023) Economic performance of Former President Muhammadu Buhari 2015-2023 pg *International Journal of Research and Innovation in Social Science (IJRISS)*
- Tawfiq, A.M. & Shawawreh, A.M. (2017). The impact of public debt on the economic growth of Jordan: An empirical study (2000-2015). *Accounting and Finance Research*, 6(2), 114-120.
- Udoh, B.E., Ekeowa, K.L., Okechukwu, I.S., Afamefuna, O.O., & Nwonye, A.C. (2020). Effect of intergenerational debt burden on economic growth in Nigeria. *Humanities and Social Sciences Letters*, 8(2), 133-144.



- Ugwu, O.J. (2017). Imperatives of domestic debt payments and economic growth: *The Nigerian Evidence. IOSR Journal of Economics and Finance*, 8(1).
- Ude, D. K. & Ekesiobi, C. S. (2014). Domestic Debt and Private Investment in Nigeria. *International Journal of Scientific Research and Education*, 2 (8), 1533-1540.
- Unini C., (2020). DMO Issues N968bn Promissory Notes to Oil Marketers, States, Others. *The Nigeria Lawyer*. <https://thenigerialawyer.com/dmo-issues-n968bn-promissory-notes-to-oil-marketers-states-others/>
- Yusuf, A., Mohd, S., & McMillan, D. (2021). The impact of government debt on economic growth in Nigeria. *Cogent Economics & Finance*, 9(1). <https://doi.org/10.1080/23322039.2021.1946249>
- Zubair A. (2021). Government Bonds and Economic Growth and Development in Nigeria: An Empirical Study. *The Open Economics Journal* x(x):1-15 June 2021x(x):1-15, https://www.researchgate.net/publication/352374581_Government_Bonds_and_Economic_Growth_and_Development_in_Nigeria_An_Empirical_Study