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Taxation, Debt Burden and Economic Growth in Nigeria

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ABSTRACT

This study examined the relationship among taxation, debt burden and economic growth in Nigeria. Specifically, it investigated the effect of company income tax; value added tax and external debt on GDP growth rate in the country. The study made use of annual data that covered the period of 33 years between 1990 and 2022 and data for this research were sourced from Central Bank of Nigeria (CBN) statistical bulletin (2022). The study employed Autoregressive Distributed Lag (ARDL) co-integration approach as research technique to estimate the model of this work. The result showed that company income tax and debt burden have significant negative impact on gross domestic product growth rate in Nigeria. The result also revealed that VAT has significant positive impact on gross domestic product growth rate in the country. In line with these findings, it was concluded that debt burden effect is not favourable in boosting growth in Nigeria. Therefore, this study recommends that government should make sure that debt acquired is spent on capital projects rather than consumption activities in order to engender greater productivity and expansion. Moreover, government of Nigeria needs to intensify more efforts to ensure proper control and prevention of corruption so as to enhance economic growth and development through taxation and debt.

Keywords— Taxation, Debit, Economic Growth

I. INTRODUCTION

Taxation is highly considered essential for any government of the world. Basically from the business perception, the country is owned by all, therefore, all needs to contribute capital to ensure government operations. Government is expected to provide social or public goods and services which cannot be covered through private funding. It compulsorily pools funds from the public and also gives room for generating revenue for the government. Also, unlike any other source of revenue which is transactional in nature, tax revenue meets government needed to influence the economy (Jimoh, Adegoriola and Adeyemo, 2019). Therefore, taxation being incorporated into economic analysis, importantly, macroeconomic analysis, had made tax revenue a key factor in the national economy.

Succinctly, taxation also gives governments more freedom in planning and managing their development agenda, forces nations to make improvements to their domestic economic policies, fostering the necessary foreign direct investment, and strengthens the bonds of accountability between governments and the people (Enehe 2020). In addition to promoting justice and addressing social and economic issues, tax systems are utilized to achieve these goals. In addition to discouraging tax evasion and avoidance, the system must be set up to minimize compliance costs for taxpayers and administrative expenses for the government. So, tax revenue is known as the money received from various taxes, including those imposed on social security payments, goods and services, wages, ownership and transfer of property taxes, and income and profit taxes.

In individual country, tax money has historically made up a negligible percentage of total government income. Every civilization must have a foundational infrastructure in place before it can flourish and taxation might help to justify government focused on figuring out how to get money to meet public demands (Ewa, Adesola Essien, 2020). The government uses tax income to fulfill its economic obligations, which include maintaining law and order, safeguarding the public against domestic and international aggression, and controlling commerce and industry to uphold social and economic stability (James, 2020). Contemporary state or nation needs a significant amount of income in order to offer and maintain basic services for its population. But, in cases whereby tax revenue generated coupled with other revenue is insufficient to meet service needs, debt is being engaged in the economy.

In the issue of debt burden, it is very important to note that several indicators describe the level of burden imposed on nations by borrowings. All these indicators as recognized in literatures weighting debt in terms of the ability of the nation to refund the debt accumulated. Debt burden so far is clearly measured in the form of debt

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overhang (i.e. total debt to gross domestic product ratio), debt service to government revenue ratio and short term external debt to foreign reserve ratio and short term external debt to foreign reserve ratio (Keshmeer, 2021). An increase or continuous increase in these indicators reflects that a country is having a high and continuous debt burden. With these, there would be insufficient funds, frequent fiscal policy, and consistent balance of payment deficit, hence the possibility of experiencing economic instability, with negative consequences on economic growth.

Statement of the Problem

Nigeria is now one of the most financially unstable nations in the Africa. Its economic expansion is stunted, its export expansion rate is slowed, its per capita income is rapidly declining, and its poverty rate is rising. The majority of these nations in Africa, including Nigeria, are frequently unable to repay the debt they have taken on since it was done hastily and in desperation. Even worse, their primary exports' declining global in prices which forces them to take on additional debt (Abdulkarim and Saidatulakmal, 2021). Nigeria's debt load significantly decreased in 2006 as a result of the Paris Club of creditors' 2005 debt relief, which was primarily driven by the desire to free up funds for investment and quicker economic growth. Sadly, the nation is now again experiencing a severe financial issue that is increasing the amount of debt owed after 14 years. Over the past ten years, Nigeria's budgeting process has grown more problematic as a result of successive administrations' alarming pace of debt accumulation and the skyrocketing cost of debt payment. Because of this, the economy is overburdened with enormous government debt and debt payment expenses, which account for over half of the government's limited revenue and reduce the government's ability to invest in vital infrastructure that enhances private investment and maintains growth.

In the midst of this, Nigeria system showed that addressing the issues around tax system in the country may be an important means of facilitating government capacity to sponsor growth objectives. Tax system in Nigeria is filled with several problems and obstacles which seem to be rationale for the limited level of tax revenue realized over the years. It is generally observed that the rate of compliance to taxes among companies and individuals are similar and is very low. Companies makes sure to take every opportunities and loopholes in the tax system to evade or avoid tax payment and the same goes for an average person in the country, such that government is mostly unable to realize projected tax revenue (Okpe, Duru & Ezeoma, 2017). In fact, this occurrence is usually attributed to the issue of maladministration which promotes inefficiency of the utilization of tax realized and led to discouragement among tax payers, corruption and embezzlement which also encourage evasion and avoidance of taxation as well as siphoning of government funds into personal treasury among public officers and political representatives.

In the empirical literature, different studies had been carried out in literature with attention given to issue of tax income, debt burden and economic expansion most especially in this country. These studies includes Akwe, 2014; Okpe, Duru and Ezeoma, 2017; Essien, Agboegbulem and Mba, 2016; Eke and Akujuobi, 2021; Onyele and Nwadike, 2021 Agbo and Onuegbu, 2020; Ewa, Adesola and Essien, 2020; Onoja and Ibrahim, 2021 etc. But these studies identified that majority of the previous studies, most especially those conducted in Nigeria, had not brought the three variables together as focus of their studies, as these studies either targeted on the effect of tax income on economic expansion or debt on growth. Therefore, this study examined the effect of taxation and debt burden on economic growth in Nigeria.

II. LITERATURE REVIEW

Brief Empirical Literature

Onyele and Nwadike (2021) used ARDL model to examine consequence of national debt burden on economic stability of the country. The result exerts that debt burden has significant negative impact on economic stability. Eke, et al (2021) also employed ARDL model and Granger causality to assess the public debt and economic growth in Nigeria, focusing on an empirical investigation using data from the year 1981 to 2018. The findings of the study revealed that public debt has a significant negative effect on the economic growth.

Essien, Agboegbulem and Mba (2016) investigated an empirical analysis of the Macroeconomic impact of Public Debt in Nigeria using data from 1970 to 2014. The study employed Vector Auto regression and Granger causality as the estimation techniques for the study. Findings from the study exhibited no significant relationship between external debt and economic growth; however, it has impact on interest rate.

George, et. al (2022) used Dynamic System Generalized Method of Moment technique to examine the capital flight's impact on sub-Saharan African countries' foreign debt and economic expansion using data period from 2000 to 2015. The result showed that both capital flight and external debt had a negative and statistically significant direct influence on economic growth. Benjamin, *et al* (2020) also employed System Generalised Method of Moments to investigate if African countries' dynamic relationships between public external debt and economic growth is a curse or a blessing. The study used data that spanning from 2001 to 2018. The result revealed that beyond a certain point, the short-run tends toward

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equilibrium in the long run, and external debt would begin to negatively affect African economic growth.

Mak, Rudra and Mahemdhidran (2021) examined if there exists any connections between institutional quality, public spending, tax income, and economic expansion using the Information from low- and lower-income nations. The study applied Panel Vector Error-Correction model (P-VECM) as estimation technique for the work. The result showed that institutional quality, public spending, tax income, and economic growth frequently have short-term endogenous relationships with one another.

Onoja and Ibrahim (2021) used cointegration analysis and Error Correction model to assess tax revenue and economic growth in Nigeria. The result of the research indicated that tax revenue exhibited significant effect on economic expansion. Akwe (2014) employed Ordinary Least Square (OLS) to investigate the impact of non-oil tax revenue on economic growth using Nigerian perspective. The findings showed that non-tax revenue has positive and significant impact on economic growth in Nigeria.

Agbo and Onuegbu (2020) also used OLS of multiple regressions to explore the impact of tax revenue on Nigerian economy using a period of 1994-2020 as the time lag to be considered. The result of study indicated that tax revenue has a positive implication on the economic expansion which also has negative implication on the company income tax. Dumisani (2022) also assessed evidence from South Africa on the relationship between tax revenue components and economic growth. It was extracted over a period of 22 years and the data was analyzed using autoregressive distributed lag (ARDL) model. The result showed that capital gain tax, foreign direct investment, and gross savings all have a negative long-run and short-run link with economic growth, while company income tax, individual income tax, and taxes on international trade and transactions all have a positive long-run and short-run link with economic growth.

Keshmeer (2021) utilized ARDL model to conduct a linear and nonlinear analysis of the Fiji Islands' external debt and economic growth in Pacific Island nations. The result showed that long-term estimation of external debt possesses a detrimental impact on economic emancipation.

Ezenwobi, et. al (2022) inquired into effect of government debt in economic development in the country. The researchers adopted descriptive statistics to examine secondary data from the year 1990-2020, and was estimated with the use of Augmented Dickey-Fuller, unit root, Johansen cointegration and Error Correction Mechanism. Findings indicate a positive significant correlation between qualitative economic indices and external debt.

Ewa, Adesola and Esssian (2020), investigated the impact of tax revenue on economic development in Nigeria using OLS regression to assess data from 1994 to 2018. Findings revealed that tax revenue has significant impact on economic growth. However it has no or little significant impact on profit..

Enehe (2020) examined the impact of tax revenue on the Nigerian economy. The study applied autoregressive distributed lag (ARDL) based. The result showed that the petroleum profit tax has a short-term negative impact but a long-term positive impact on the gross domestic product of Nigeria. More so, Value added has a significant negative impact on economic growth, while custom and excise duty and company income tax have positive and significant long-term effects on the gross domestic product of Nigeria and that value added has a short-term negative impact on GDP but a long-term positive impact.

III. RESEARCH METHODS

Model Specification

This study adapted the model of which employed gross domestic product as measure of value added tax (VAT), company income tax (CIT) and petroleum profit tax (PPT). The two models were linearly expressed as thus:

$$GDP_t = \alpha_0 + \alpha_1 VAT + \alpha_2 CIT_t + \alpha_3 PPT_t + u_t ----------1$$

However, this study used "Gross Domestic Product Growth Rate (GDPGR), as measure of economic growth (dependents variable), while company income tax (CIT), value added tax (VAT)" and external debt (EXD) are taken as explanatory variables. In addition, interest rate ((INT) is considered as control variable since it is recognized as important factor that determines level of investment which is necessary for economic growth. As such, the model for this study is specified as follows:

$$GDP_t = \beta_0 + \beta_1 CIT + \beta_2 VAT_t + \beta_3 EXD_t + \beta_4 INT_t + v_t ---2$$

Method of Data Analysis

This study used inferential statistics methods for time series analysis, starting with preliminary test, unit root test specifically Augmented Dickey Fuller (ADF) unit root test, followed by co-integration method. The co-integration method of Autoregressive Distributed Lag (ARDL) bound

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test as well as ARDL short run and long run estimation test is chosen based on the outcome of the unit root test conducted.

Source of Data

This study employed secondary time series data extracted from the "World Development Indicators" edition of 2023, and "Central Bank of Nigeria statistical Bulletin" over the period of thirty-three years spanning from 1990-2022.

IV. RESULTS AND DISCUSSION

Unit Root Test

The test shows the sequence of "integration of each of the variables, which reflect the behavior of each of the variables when exposed to external shock. Unit root test employed is this study is the Augmented Dickey-Fuller (ADF) tests, and the summary is presented in table 1:

Table 4.1: Summary of Unit Root Test Result

Variables	ADF statistics	1% critical value	5% critical value	Order of Integration
GDPGR	-1.79311	-3.661661	-2.960411	I(1)
CIT	-2.203401	-3.670170	-2.963972	I(1)
VAT	-3.888032	-3.284580	-3.562882	I(0)
TXD	-2.329223	-3.661661	-2.960411	I(1)
INT	-3.029064	-2.653730	-2.957110	I(0)

Note: **(**)*** connote significance at 1%, (5%), 10% significant levels respectively*
Source: *Author's Computation, (2023)*

Unit root test result presented in table 4.1 revealed that gross domestic product growth rate, company income tax, and total external debt only become stationary after first differencing, i.e these series are integrated of order one I(1). On the other hand, value added tax and inflation rate are stationary at level, meaning that they are integrated of order zero I(0), reflecting that this variable does not retain innovative shock passed on it more the same period". Hence summary of unit test conducted in the study showed that "series included in the models for the study are integrated of mixed order i.e I(0) and I(1)

Table 2: ARDL Co-integration Bound Test

F-Statistic	Lower Bound Critical Value	Upper Bound Critical Value
7.16395	2.86	4.01

Note: *critical values are values at 5% significant level.*
Source: *Authors" Computation, (2023)*

Table 2 reported "lower and upper bound critical values, as well as the F-statistics for the Wald test carried out to test the joint null hypothesis that the coefficients of the lagged level variables are zero i.e no long run relationship exists between the variables. The result showed an F-statistics value of 7.16395 and bound critical values of 2.86 and 4.01 for lower and upper bounds respectively. Comparing the F-statistic to the critical values it was observed that the F-statistics is greater than the upper bound critical value (a condition for the rejection of the null hypothesis of no long run relationship). Thus the study rejects the null hypothesis in favour of the alternative hypothesis of presence of long run relationship" between the variables.

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Table 3: ARDL Short run and Long run form Estimation Result

Short run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CIT)	-0.077425	0.519400	-0.149066	0.0430
D(CIT(-1))	0.212461	0.344907	1.389026	0.0923
D(VAT)	-0.976809	1.581148	-0.617785	0.5397
D(VAT(-1))	3.748609	1.721706	2.177265	0.0416
D(EXD)	-1.543441	3.228698	-0.478038	0.1550
D(INT)	-3.148218	1.272652	-2.473746	0.0225
CointEq(-1)	-0.874889	0.168024	-5.206920	0.0000
Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CIT	-1.818402	0.633588	2.870008	0.0095
VAT	5.078979	2.249376	2.257951	0.0353
EXD	-4.224316	16.029980	-1.394173	0.0486
INT	-1.528250	3.324293	2.565433	0.0185
C	3.549939	1.671734	3.319869	0.0068

Source: *Author's Computation, (2023)*

Result in Table 3 reveals short run and long run estimation of ARDL model. In the short run, result shows coefficient and probability of -0.077425 and 0.043 ($p < 0.05$) for D(CIT), -0.976809 and 0.5397 ($p > 0.05$) for D(VAT) as well as -1.543441 and 0.1550 ($p > 0.05$) for D(EXD). This shows that whenever there is 1% increase in company income tax, value added tax and external debt, there is about 0.07%, 0.21% and 1.54% decline in gross domestic product growth rate, indicating that company income tax and value added tax has insignificant negative effect on gross domestic product growth rate. Reported CointEq(-1) of -0.874889 and 0.0000 showed that only about 87.4% of the short run inconsistencies is corrected and incorporated into the long run dynamic annually. On the other hand, the long run result shows coefficient and probability of -1.818402 and 0.0095 ($p < 0.05$) for CIT, as well as -4.224316 and 0.0486 ($p < 0.05$) for EXD. This shows that whenever there is 1% increase in company income tax, value added tax and external debt; there is about 1.18% and 4.22% decline in gross domestic product growth rate, indicating that company income tax and value added tax has significant negative effect on gross domestic product.

V. CONCLUSION AND RECOMMENDATIONS

This study explored the relationship among taxation, debt burden and economic growth in Nigeria. The results of the study revealed that both in the short and long run, there is negative impact between company income tax, external debt, interest rate and economic growth while value added tax has positive impact on economic growth in the long run. In line with the findings of this study, it is therefore concluded that in terms of taxation, company

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income tax is detrimental to economic growth of the country, whereas value added tax is beneficial to economic growth. On the other hand, this study concluded that external debt is not favourable to Nigeria in regard to economic growth due to the factors such as inefficiency, inadequate utilization of debts in government activities, corruption and government inconsistencies among others. Therefore, this study recommends that government should make sure that debt acquired is spend on capital projects rather than consumption activities in order to facilitate economic production and expansion. Moreover, more effort from government is needed to ensure proper control and prevention of corruption so as to enhance economic growth through government taxation and debt.

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