Empirical Investigation of Government Expenditure and TaxPayers Compliance in Nigeria

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ABSTRACT

The research looks at taxpayer compliance and government spending in Nigeria's economy from 1992 to 2022. The CBN statistics bulletin from 2022 served as the source of the data. The research used many factors, including public capital spending, government recurrent expenditure, compliance with value-added tax, firm income tax compliance, and gross domestic product and put (GDP), as indicators of the Nigerian economy. Analytical methods for the research included time-series econometrics. Additionally, the analysis demonstrates that capital expenditures by the government significantly boost Nigeria's GDP. Although insignificant, government recurrent spending has a favourable effect on Nigeria's GDP. Nigeria's gross domestic product benefits greatly from value-added tax compliance and Company income tax compliance. According to the coefficient of determination, changes in government spending variables may account for almost 78% of the fluctuations in the Nigerian economy. The paper concludes that government expenditure and tax payers' compliance has a substantial outcome on the Nigerian economy. Recommendations are that, Government should reduce the amount set on value added tax and company income tax, to boost compliance and that generated tax revenue must be sufficiently, efficiently and judiciously utilized. Fiscal policies towards increase in recurrent expenditure should be the norm. Government should spend more on recurrent expenditure because it has a positive impact on the economy. Lastly, capital projects should be well supervised to ensure that it meets the needs of the people.

Keywords: Government, expenditure, tax payers, compliance Nigeria

INTRODUCTION

Every country in the world aspires to expand, and the Nigerian economy is no different. According to Potters (2023), economic growth is defined as the total value of all products and services produced within a country in a given year. The growth of an economy is measured by a rise in gross domestic product (Potters, 2021). Strive for growth in an economy however is anchored on various activities of the different players in the system, comprising of individuals of both the private (businesses) and public (government) sector settings. The concern of this study however is basically on the government and the growth of the economy.

The government must increase spending to support infrastructure, health, education, and other services that are necessary to realise the shared objective of a successful, functioning, and orderly society. This will also promote economic growth and development.

According to Chandana et al. (2021), government spending is still a crucial tool for growth. It is essential to every economy's operation at almost every level of growth. Most developed and developing countries use public expenditure today to influence the structure of national income, enhance the distribution of income, and allocate resources to priority areas (Vtyurina, 2020).

Government expenditure or spending as a pivotal tool in the growth process of an economy has been put forward by Corporate Finance Institute (CFI, 2022) as the amount of money that the government spends on purchasing products and providing services, such as healthcare, social security, education, and defense.

Statement of the Problem

Over the years there has been a debate on how the revenue generated from tax payers compliance to taxes are being structured into the government expenditure and how it affects the tax payers and the economy at large. To some, the compliance to tax and the revenue generated has not been felt, as they feel the resources have so far not been utilized for the benefit of the society. This has resulted in individuals and business owners trying to evade the payment of taxes or avoiding it totally. This has been a major concern of tax authorities in formulating the right set of policies that will ensure the compliance to tax by individuals for revenue generation in the economy (Oyedokun, & Christopher, 2022).

Though government expenditure and tax payers' compliance has been seen to altogether be pivotal and much related in ensuring the growth process of an economy, which on empirical ground has garnered so many studies, however they have been studied separately, not together. The results from these studies have proven to again be inconclusive, as some reported a significant effect, whereas others reported an insignificant effect on the Nigerian economy.

Studies on tax compliance by Oladele (2021) and Kupoluyi et al. (2022) reveal a significant impact between tax payers' compliance and the Nigerian economy. Similarly, the studies by Oyedokun& Christopher (2022), Binglar & Preye (2020), and Okoli& Matthew (2015) hold that taxation has a positive and significant influence on economic growth. However, the results of these studies have been countered by the findings from the studies of Okafor (2012), Madugba and Azubike (2016), and Abiola & Asiweh (2012), who argue that taxation does have an unfavourable and inconsequential outcome on economic growth.

The cases above shows that none of the previous studies utilized both government expenditure and tax payers' compliance or taxation in a single model against the Nigerian economy, as they were modelled separately. Again, the choice of data and the span of the data were not up to date or varying, which may have brought about the inconsistencies of the findings. Regardless of which side of the debate is stronger, it is clear that additional research is required to go beyond the parameters and techniques used in these investigations.

Conceptual Review

According to Dollarhide (2021) public spending encompasses all forms of investment, transfer payments, and consumption. In the context of national income accounting, government final consumption spending is defined as the purchase of goods and services for immediate use to directly meet the needs of the community, whether they be individual or group. Government investment is defined as purchases of commodities and services to create future rewards like infrastructure projects or research expenditures (government gross capital creation). Together, these two categories of government spending—on gross capital creation and final consumption—make up a significant portion of the GDP.

The government may pay its expenditures via a variety of methods, including borrowing, taxes, customs charges, leasing or selling natural resources, and fees such as license or entrance fees to national parks.

Governments must pay interest on borrowed funds when they decide to borrow money (Gruber, 2015). Spending adjustments made by the government are a key element of the fiscal policy that stabilises the macroeconomic business cycle.

Government expenditure is a valuable instrument for implementing economic policies. Using taxes and/or government spending to impact an economy is known as fiscal policy (Taylor, 2017; Gruber, 2015). Two

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primary classifications exist for fiscal policy: contractionary and expansionary. Contrary to contractionary fiscal policy, which involves a decrease in public spending or an increase in taxes, expansionary fiscal policy consists of increasing government spending or reducing taxes. Governments may use expansionary fiscal policy to boost the economy in a downturn. For instance, a rise in government expenditure immediately raises consumer demand for products and services, which in turn may support higher production and employment levels. Conversely, during an economic boom, governments might use contractionary fiscal policy to decelerate economic growth.

Theoretical Framework

One way to think about the idea of optimum taxation is to figure out how to reduce the tax burden. As previously said, the expenses that are the subject of this literature are the costs associated with inefficient, one-sided taxation. However, the studies and theories of tax evasion give little to no weight to the more obvious expenses of administration and filing. Although the tax evasion perspective seems to be very important for some aspects of taxes, the potential benefits of using the views of the tax evasion literature in the study of optimum taxation have not yet been completely realised. This is true, at least in part, for the personal income tax's degree of progressivity; much more true for the line between personal and corporate taxes as well as the degree of indirect tax system difference. Akintoye and Tashie (2013) suggest that the literature on tax evasion may serve as a tool to draw attention to tax administration difficulties in the theoretical literature on tax planning.

Empirical Review

Okeke and Saluadeen (2021) assess how well the 2007 Company Income Tax (CIT) Reform has improved Nigerian businesses' tax compliance practices. Data were taken from the National Bureau of Statistics records for the total amount of firm income tax paid yearly and the total GDP for each of the study's years. The research spans twenty years: ten before the reform, from 1997 to 2006, and ten after the reform, from 2008 to 2017. A technique for analysis was the Wilcoxon rank sum test. According to the report, businesses are now more compliant than they were before the reform. The report suggests further changes to boost the number of incentives offered to businesses to improve tax compliance.

Oladele (2021) looked at how tax compliance affects Nigeria's economic growth. The lack of empirical research on adherence to taxes and economic growth in Nigeria served as the main impetus for this research. The specific goal looked at how tax compliance affects Nigeria's per capita income and human capital development. Regression analysis was used for the data analysis, and a quantitative research design was used in an attempt to accomplish this goal as it was determined to be acceptable for the quantitative research model supporting the current investigation.

Kupoluyi et al. (2022) investigated how tax administration affected Nigerian taxpayer compliance. The research is qualitative, relying on secondary data sources and the Expectancy Theory of Motivation as its theoretical foundation. According to research, well-implemented tax administration can boost tax compliance in Nigeria, which will raise tax collections, deter tax evasion, promote sound public administration, and foster good governance. For Nigeria's national growth and robust public finances, the study suggests pursuing both tax administration and compliance.

In their research, Augustine et al. (2020) used time series data spanning 15 years (2004–2018) to assess the outcome of public spending on economic development in Nigeria. The study's independent variables were recurrent spending, highway spending, safety expenses, and education costs, whereas the dependent variable was real GDP. Four goals were established for the investigation, and four hypotheses were developed to support those goals. The study utilised an ex-post facto research design and generated and analysed time series data through various techniques such as regression analysis, ARDL testing, Granger causality, unit root test, cointegration, and the ECM. The aim was to investigate the long-term causal relationship between

public spending and GDP growth in Nigeria.

METHODOLOGY

A study design offers an investigation's general framework for the collection and analysis of data, as well as its overall structure and direction. As a result, the study uses an ex-post facto research design. Since the study's variables are derived from the yearly accounts of the firms being examined, the researcher is unable to alter or influence them.

Model Specification

In this study, hypotheses have been stated with the view of examining the outcome of government expenditure and taxpayers' compliance on the Nigerian economy. Real GDP was used as a stand-in for the Nigerian economy, while capital expenditure, recurrent expenditure, value-added tax compliance, and corporation income tax compliance were used to assess government spending and taxpayer compliance. The following is a functional presentation of the model that captures the study variables: Y is the dependent variable, or the "Nigerian economy," and X is the independent variable, or the real gross domestic product, capital expenditure, recurrent spending, compliance with value-added tax laws, and compliance with corporate income tax laws.

The multiple linear regression models for this study are defined as:

$Y= \beta_0 + \beta_1X_1+\beta_2X_2 +\beta_3X_3+\beta_4X_4+ e$, $RGDP = \beta_0 +\beta_1CPEXP_1+ \beta_2RCEXP_2+ \beta_3VATC_3+ \beta_4CITC_4 + e$,

Where:

β_0=Constant, e = Error term,

RGDP = Real Gross Domestic Product,

CPEXP = Government Capital expenditure,

RCEXP = Board Gender,

VATC = Value Added Tax Compliance,

CITC = Company Income Tax Compliance

PRESENTATION AND ANALYSIS OF DATA

Descriptive Statistics

Table 1 summarizes the results of the descriptive analysis for each variable in the study, including the number of observations, the standard deviation, the maximum, minimum, and mean.

Table 1: Summary of Descriptive Statistics

	RGDP	CPEXP	RCEXP	CITC	VATC
Mean	53178.81	908.3429	3117.420	697.5733	593.7020
Median	56061.65	846.5325	3211.946	662.8300	600.1200
Maximum	74694.00	2288.996	8121.640	1604.699	1531.171

Minimum	25267.54	241.6883	579.3000	68.70000	91.80000
Std. Dev.	16174.28	509.3128	2088.886	498.5879	406.7391
Skewness	-0.276374	1.065280	0.841101	0.176334	0.546778
Kurtosis	1.657475	3.922401	3.041231	1.681153	2.537514
Jarque-Bera	1.756585	4.491758	2.359589	1.553110	1.174800
Probability	0.415492	0.105834	0.307342	0.459988	0.555771
Sum	1063576.	18166.86	62348.39	13951.47	11874.04
Sum Sq. Dev.	4.97E+09	4928592.	82905484	4723208.	3143297.
Observations	31	31	31	31	31

Source: Author's Computation 10.1

Table 1, the mean values of real GDP, public spending on (CPEXP), and (CEXP), Company Income Tax (CIT) compliance and Value added tax (VAT) compliance are 53178.81, 908.3429, 3117.420, 697.5733 and 593.7020 respectively. It is observed from the table that Value added tax (VAT) compliance had the lowest standard deviation of 406.7391 while Gross Domestic Product (GDP)have the highest standard deviation of 16174.28. All of the variables, with the exception of real GDP, were favourably skewed, with the exception of multilateral debt, bilateral debt, and debt service costs, according to the skewness statistics, which indicate the degree of asymmetry or deviation from symmetry. The kurtosis measures how peaked a distribution is, and it was found that every variable had a reasonably high peaked distribution, known as a leptokurtic distribution, since all of its values were fewer than three (<3).

Table 2: Augmented Dickey-Fuller Unit Root Result

Variables	**Unit Root Test @Levels**			**Unit Root Test @1st Difference**			**Order of Integration**
	Trend and Intercept			**Trend and Intercept**			
	t-stat	**Critical Value**	**Prob.**	**t-stat**	**Critical Value**	**Prob.**	
GDP	0.4669	-3.71048	0.9979	-4.8884	-3.7104	0.0061*	I(1)
CPEXP	-3.2084	-3.75974	0.1199	-3.6355	-3.0655	0.0173*	I(1)
CEXP	-1.3549	-3.02997	0.5817	-4.6896	-3.0403	0.0018*	I(1)
CITC	-2.2382	-3.02997	0.2003	-3.5243	-3.0403	0.0195*	1(1)
VATC	-1.5157	-3.02997	0.5042	-3.2454	-3.0403	0.0338*	I(1)

Source: Author Computation from E-view output, 2021

*Note *'** denote 5% significance level, while -3.612 represent critical value at 5%*

Source: Researchers compilation with E-view 10.1

Table 3: Error Correction Model (ECM)

Dependent Variable: D(LOGRGDP)		
Method: Least Squares		
Date: 16/02/24 Time: 11:37		
Sample (adjusted):1992- 2022		

Included observations: 31 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.022676	0.013546	1.674078	0.0080
D(CPEXP)	-0.013834	0.024481	0214090	0.0016
D(RCEXP)	0.082821	0.064275	1.288543	0.0009
D(CITC)	0.193891	0.040975	1.346956	0.0004
D(VATC)	-0.042389	0.060497	0.700678	0.0021
ECM(-1)	-0.791997	0.000828	1.261376	0.0009
R-squared	0.782289	Mean dependent var		0.054228
Adjusted R-squared	0.763523	S.D. dependent var		0.045158
S.E. of regression	0.029491	Akaike info criterion		-3.957398
Sum squared resid	0.011306	Schwarz criterion		-3.659154
Log likelihood	43.59528	Hannan-Quinn criter.		-3.906923
F-statistic	5.841254	Durbin-Watson stat		2.139113
Prob(F-statistic)	0.004825			

Source: Author's computation 10.1.

Our result show that capital expenditure (CPEXP) and value added tax compliance (VATC) has an unfavourable outcome on the growth (GDP) of the Nigerian economy, coefficients of -0.013834 and -0.042389 respectively. However, Company income tax compliance (CITC) and Government recurrent expenditure (RCEXP) had positive impact on the growth (RGDP) of the Nigerian economy, with coefficients of 0.082821 and 0.193891 respectively.

HYPOTHESES TESTING

The output indicates significance at the 5% level, and the E-view emphasised the significant result. If the p-value is less than 0.05, adopt the alternative hypothesis. If not, reject it. The proposed hypotheses are tested as follows:

Hypothesis One: Ho_1: Public capital expenditure has no substantial effect on the Gross Domestic Product in Nigeria. The results revealed that government capital expenditure has a t-stat value of0214090 and a p-value of 0.0016>0.05 alpha. Therefore, we can argue that there is substantial impact on independent variables. This suggests that government capital expenditure has an unfavourable and inconsequential outcome on economic expansion in Nigeria.

Hypothesis Two: Ho_2: Public recurrent expenditure has no substantial effect on the Gross Domestic Product in Nigeria. The results it is visible that government recurrent expenditure have a t-stat value of 1.288543and a p-value of 0.0009 which is less above five percent (5%) alpha. Therefore, we can agree that a favourable but insignificant relationship exists between the dependent and independent variables.

Hypothesis Three: Ho_3: There is no significant impact on value added tax (VAT) compliance and the Gross Domestic Product in Nigeria. The results it is visible that value added tax (VAT) compliance has a t-stat value of0.700678and a probability value of 0.0021 which is less than five percent (0.05) alpha. Therefore, we can agree that a favourable and substantial impact exists.

Hypothesis Four: Ho_3: There is no significant impact of company income tax compliance on Gross Domestic Product in Nigeria. The results it is visible that company income tax compliance has a t-stat value of 1.346956and a p-value of 0.0004 which is less than five % (0.05) alpha. Therefore, we can agree that a favourable and substantial impact exist the variables.

CONCLUSION AND RECOMMENDATIONS

The research concludes that tax-payer compliance and government spending have a big influence on the Nigerian economy. Table 3 provides proof of this. Thus, it is also confirmed that tax compliance and government spending can significantly propel the expansion of the Nigerian economy. The results suggest that recurring spending increased Nigeria's GDP, so the government should support it. The government needs to undertake a comprehensive restructuring of the tax administration apparatus to minimise the issues of tax evasion and avoidance. To increase compliance, the government should introduce electronic payment across border and establish task force to monitor compliance.

To support sustained economic growth, enough tax revenue must be created and used wisely and effectively. Fiscal policy geared towards the increase in recurrent expenditure should be put in place. Government should rather spend more on recurrent expenditure as it has a favourable outcome on Nigeria. Government should reduce the expenditure or funds thrust towards capital projects, as its increase tends to affect the advancement of the economy. Moreso, capital projects should be well monitored to ensure that it meets the needs of the people and not just abandoned, and funds wasted.

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APPENDIX 1

Government Expenditure and Taxpayers Compliance in Nigeria (1992-2022)

YEAR	Capital Expenditure (N, Bill)	Recurrent Expenditure (N, Bill)	Value Added Tax Compliance (N, Bill)	Company Income Tax Compliance (N, Bill)	Gross Domestic Product (N, Bill)
1992	438.7	579.3	91.8	68.7	5,267.54
1993	321.4	696.8	108.6	89.1	8,957.71
1994	241.7	984.3	136.4	114.8	1,709.45
1995	351.3	110.8	159.5	113	5,020.55
1996	519.5	321.3	178.1	140.3	7,474.95
1997	552.4	390.2	221.6	244.9	9,995.50
1998	759.3	589.3	289.6	275.3	2,922.41
1999	960.9	,117.4	401.7	420.6	6,012.52
2000	152.8	128.0	481.4	600.6	9,856.10
2001	438.7	579.3	91.8	68.7	25,267.54
2002	321.4	696.8	108.6	89.1	28,957.71
2003	241.7	984.3	136.4	114.8	31,709.45
2004	351.3	1,110.8	159.5	113	35,020.55
2005	519.5	1,321.3	178.1	140.3	37,474.95
2006	552.4	1,390.2	221.6	244.9	39,995.50
2007	759.3	1,589.3	289.6	275.3	42,922.41
2008	960.9	2,117.4	401.7	420.6	46,012.52
2009	1,152.8	2,128.0	481.4	600.6	49,856.10
2010	883.9	3,109.4	564.89	666.06	54,612.26
2011	918.5	3,314.5	659.15	659.6	57,511.04
2012	874.7	3,325.2	710.56	816.52	59,929.89
2013	1,108.4	3,689.1	802.69	963.55	63,218.72
2014	783.1	3,426.9	802.96	1,180.41	67,152.79
2015	818.4	3,831.9	635.35	1,229.02	69,923.93
2016	653.6	4,160.1	828.1991	933.54	67,931.24
2017	1,242.3	4,780.0	972.3484	1,215.06	68,490.98
2018	1,682.1	5,675.2	1,108.04	1,340.33	74,694.00
2019	2,289.0	6,997.2	1,189.98	1,604.70	72,094.08
2020	1,614.9	8,121.6	1,531.17	1,275.38	70,800.54
2021	1,854.9	9,321.6	1,871.17	1,435.38	74,721.54
2022	1,88453	9,8573.3	1,886.34	1,947.73	74,835.23

Source: CBN statistical Bulletin, 2022