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TAX STRUCTURE AND ECONOMIC PERFORMANCE IN NIGERIA

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Abstract

This study investigates the relationship between tax structure and economic performance in Nigeria. Gross domestic product growth rate and per capital income were proxy for the dependent variables, while direct taxes, indirect taxes. Time series data were sourced between 1996 and 2024, the result of the stationarity test showed the presence of mixed order integration among the variables, this necessitated the use of the Autoregressive Distributed Lag technique for statistical analysis, this technique captured both short-run dynamics and long-run equilibrium relationships. The study uses the Trickle-Down Theory as a theoretical framework and focuses on the transmission of macro benefits in the form of effective taxation and governance. Empirical evidence indicates that indirect taxation positively and statistically impacts both the growth rate of the gross domestic product as well as per capita income, while direct taxation provides a negative and significant impact on per capita income but a statistically insignificant result concerning the growth rate of the gross domestic product. These findings are partly consistent with the apriori expectations and highlight the differential impacts of tax types on macro indicators. This study's findings augment the extant literature of fiscal efficiency in the context of the developing economy by highlighting the prevalence of indirect taxation in promoting the growth of the economy. Hence, the study recommends that there is need to expand value added tax base, at the same time reduce the burden of direct tax on low-income earner.

Keywords:

Tax structure, Direct tax, Indirect Tax, Economic Performance.

Introduction

The impact of taxation on long-run gross domestic product (GDP) level is one of the most important controversial issues in the literature. Taxation is one of the most effective tools that serves to collect the necessary fund as revenue for public spending, improvement of infrastructure, as an economics' stabilizer and can influence the allocation of resources in a

country (Prammer, 2011). The relevant literature has demonstrated the different impact of taxes on economic growth and other economic variables. According to Zipfel and Heinrichs (2012) that studied the impact of taxes on economic growth in European nations, taxes could alter the economic decisions where it can affect the economic growth negatively or positively. According to Palić, Žmukand Grofelnik (2017), the impact of taxes on economic growth depends on the structure of the tax system. A proper tax system will help a government achieve national fiscal goals most effectively, limit undesirable distortions, minimize welfare losses, and ultimately promote economic growth (Stoilova, 2017). Previous studies state that every adjustment of tax components can influence economic growth. For example, Kneller, Bleaney and Gemmell (1999), Arnold, Brys, Heady, Johansson, Schwellnus and Vartia (2011) and Baiardi, Profeta, Puglisi and Scabrosetti (2019) suggest that reducing the proportion of direct tax and increasing the proportion of indirect tax will positively impact economic growth. This adjustment is both to secure the budget revenue and to facilitate investment in the private sector. It is worth noting that the tax structure may be optimal in one country, but it may not be as good in other countries, due to many reasons such as differences in the economic structure, political characteristics, society, a tax burden and governments' management ability. Studies concerning the elements that drive economic development are popular among scholars. Taxes are among the most studied variables because they drive a country's economic policy (Shahmoradi et al., 2019).

The choice of direct and indirect taxes is important to determine the efficient of allocation resources especially tax revenue as well as improvement of economic growth. A study conducted by Lee and Gordon (2005) for 70 countries found the significant and negative relationship between statutory corporate tax rates and economic growth. The negative effects of corporate taxes on growth were supported by Schwellnus and Arnold (2008) and Vartia (2008). Their studies indicate a negative relationship between corporate taxes and productivity of firms which can be related to the economic growth across OECD countries. On the other hand, a study of taxes and economic growth by Ahmad et al. (2016) suggested increasing the direct taxes and cutting the indirect taxes to stimulate the economic growth. Moreover, Widmalm (2001) revealed a negative relationship between income (direct) taxes and economic growth, while the negative effects of indirect taxes on economic growth are not confirmed.

Literature Review and Hypotheses Development

Direct Taxation and Economic Growth

Direct taxes, which include levies like income tax and corporate tax, play a pivotal role in shaping the economic landscape of a country. They are not just tools for revenue generation but also instruments of fiscal policy that can influence macroeconomic variables such as consumption, investment, and income distribution. By directly impacting the disposable income of individuals and the earnings of corporations, direct taxes have the power to alter spending and saving habits, which in turn can drive economic growth.

From the perspective of **government policy**, direct taxes are essential for garnering resources necessary for public expenditure. They fund infrastructure projects, healthcare, education, and social welfare schemes, which are the backbone of economic development.

Moreover, progressive tax systems, where the tax rate increases with income, can help reduce income inequality by redistributing wealth from the richer segments of society to the poorer ones.

Economists argue that direct taxes, when designed efficiently, can boost economic development without discouraging individuals from working harder or businesses from investing. For instance, a lower corporate tax rate can encourage companies to reinvest their profits into expansion and innovation, leading to job creation and technological advancements.

Business leaders often emphasize the need for a stable and predictable tax regime that allows for long-term planning and investment. High tax rates can lead to capital flight and discourage foreign investment, while tax incentives can attract multinational corporations, leading to technology transfer and skill development.

Myles (2000) empirically ascertained that direct tax policy is a stimulant to economic growth. Barry and Jules (2008) found that direct taxes impacted negatively on economic growth in the US. Margalioth (2003) reported that direct taxation is harmful to growth in endogenous growth models. The results of Mamatzakis (2005) hold that direct taxes have significant positive impact on economic growth in South Africa. Tosun and Abizadeh (2005) reported that the share of personal income tax responded positively to economic growth. McCarten (2005) found that the ratio of direct tax to GDP and the ratio of direct tax to total tax stimulated real GDP growth in Pakistan. Tosun and Abizadeh (2005) reported that corporate income taxes are the most harmful to growth as well as personal income taxes. Lee and Gordon (2005) using cross-country data found that statutory corporate tax rates are significantly and negatively correlated with cross-sectional differences in average economic growth rates having controlled for other determinant of economic growth. Djankor et al (2009) found strong negative effect of personal income tax on output growth. Scarlett (2011) established empirically that an increase in the share of taxes from personal taxable income has the greatest harm on per capital GDP over time and correction to equilibrium from such an impact would take up to nine years. Arnold et at (2011) found that personal income taxes are progressive with marginal tax rates that are higher than their average rate with the implication of discouraging savings and labour supply. Arisoy and Unlukaplan (2010) tested the effect of direct-indirect tax composition on economic growth in Turkey. The empirical finding of their study holds that direct taxes have no significant effect on economic growth. Aamir, Qayyum, Nasir and Hussain (2011) found significant impact of direct taxation on the total revenue of the economy of India.

$H0_1$ There is no relationship between direct tax and gross domestic product in Nigeria.

Indirect Taxation and Economic Growth

The relationship between indirect taxation and economic growth has been examined severally by different researchers. Few, if any have examined this line of research in Nigeria. Chelliah (1989) observed that an increase in indirect taxation compared to direct taxation reduces economic growth more than direct taxation does. Their research finding supports the position of Harbenger (1964). Aamir et al (2011)'s research findings had it that increasing revenue from indirect taxes is more conducive for economic growth in the long run in Pakistan. Ajakaiye (1999) found that VAT has a negative effect on economic growth in Nigeria. In a more broad study, Romer and

Romer (2000) resolved that progressive taxation affords policy makers the opportunity to pursue counter-cyclical fiscal policies which drives economic growth. Specifically, they are of the view that VAT can only increase growth when enforcement and implementation procedures are effective. This position was strengthened by McCarten (2005). According to Bird (2003), the most effective tax for developing countries is one that produces the largest amount revenue in the least costly and disproportionate manner. He identified broad based VAT as an ideal tax that suits the situation. Emran and Stiglitz (2005) argued that the recent resolution that favours the gradual reduction and the subsequent elimination of sales taxes in favour of VAT as an instrument of indirect taxes in developing economies is worrisome. According to him, it is built on a fragile result derived from an incomplete model that relegates the presence of active informal sector.

Direct and indirect taxes have been argued to have differential effects on economic growth by (Avi-Yonah and Margalioth, 2007). Two third of the total tax revenue generated in developed countries can be traced to direct taxation, but the use of indirect taxation has been advocated by some who recommend developing countries focus on indirect taxation (Avi-Yonah and Margalioth, 2007). In relation to empirical research in Nigeria on the impact of tax on the economy of Nigeria, Tax is found to have a positive effect on economic growth by Abiola and Asiweh (2011); Okafor (2012); Salami *et al.* (2015); Oyewo (2013); and Okoli, Njoku, and Kaka (2014).

Chigbu and Njoku (2015) investigated the impact of taxation on the Nigerian economy for the period 1994 - 2012. The dependent variables used in the model are; Gross Domestic Product (GDP) as a parameter for measuring economic growth, inflation and unemployment. The results of the statistical analysis revealed that positive relationships exist between the explanatory variables (Custom and Excise Duties, Company Income Tax, Personal Income Tax, Petroleum profit tax and Value Added Tax) and the dependent Variables (Gross Domestic Product, Unemployment). Ogbonna and Odoemelam (2015) investigated the impact of taxation on economic development of Nigeria proxied by the gross domestic product (GDP). Secondary data were sourced from Central Bank of Nigeria (CBN) Statistical Bulletin, Federal Inland Revenue Services (FIRS) and other relevant government agencies for the period covered in the study, 2000-2013. The data were analyzed using descriptive statistics, econometric model with the aid SPSS version 20. The results showed that a strong positive and significant relationship exists between economic development and Tax variables use

$H0_2$ There is no relationship between indirect tax and gross domestic product in Nigeria.

Indirect taxes have a complex relationship with GDP growth, where the impact depends on the specific tax, the economic context, and whether the analysis is short-term or long-term. While some studies find indirect taxes can positively influence GDP, others show negative or insignificant impacts, particularly in the short run. Factors like tax rate, government spending, and the overall economic environment play a crucial role in determining the net effect. Some studies find that while indirect taxes like VAT may not be significant short-run drivers of growth, other taxes such as consumption duty and excise duties can be. In the long run, indirect taxes can influence GDP positively by contributing to government revenue, which can be used for public investment. However, this effect is contingent on the government implementing policies that

foster a favorable business environment and support entrepreneurship. High indirect tax rates can increase the cost of goods and services, potentially reducing consumer demand and investment, and can disproportionately affect small businesses and low-income households. Policymakers must balance the need for government revenue with the potential for taxes to slow down economic growth. Therefore, it is recommended to ensure that indirect taxes are not excessively high and that policies are in place to support economic growth (Stoilova & Patonov (2013).

$H0_3$ Direct tax has no significant relationship with per capita income in Nigeria.

Direct taxes can positively influence per capita income by being a source of government revenue for public services and infrastructure, which are essential for economic development. Some studies suggest a positive and significant relationship between various direct taxes, such as personal and corporate income tax, and economic development indicators like per capita income and the Human Development Index (HDI). However, the specific relationship is complex and can depend on the structure of the tax system and its administration.

According to Olufemi et al. (2023), redistribution of income is the use of tax and transfer policies to reduce income inequality. This, however, does not mean that the rich and the poor will become equal; rather, it can reduce the gap between the two by collecting more revenue from the wealthy and less from the less wealthy in order to provide common economic goods. Redistribution of income also has the effect of increasing the consumption capacity of the poor to a level that is more comfortable for them to consume. In response to this, Lustig (2017) says that the introduction of efficient economic measures, such as taxation, would be the only way to reduce or abolish income disparity. These wealthy class of individuals will be accountable for the greater part of payment of the tax revenue, which is a system that is known as progressive tax (Hines, 2015). This economic theory proposes that those who have more wealth or earn a greater income will be subject to a higher level of taxation.

$H0_4$ Indirect tax has no significant relationship with per capita income in Nigeria.

Indirect taxes like VAT and import duties are a significant part of Nigeria's revenue, while per capita income is a measure of the average income per person, which is influenced by factors including the tax system. Indirect taxes can disproportionately affect lower-income individuals because they are often regressive, meaning everyone pays the same rate regardless of income. Indirect taxes are levied on goods and services and are transferred from the seller to the consumer. Nigeria's per capita income is a key economic indicator that has been impacted by government policies and the overall economic environment.

Using secondary time series panel data that encompassed the years 2005 to 2014, Lyndon and Paymaster (2016) investigated the effects of businesses' income tax and value-added tax on economic growth (measured as a proxy by gross domestic product) in Nigeria. Both the corporation income tax and the value-added tax have a favourable effect on economic growth, according to the analysis' findings. Analyzing information from the years 1995 to 2010, Stoilova & Patonov (2013) also looked at how taxes affected economic growth in 27 nations within the European Union. They found that compared to indirect taxes, direct tax revenue had a more effective impact on economic growth in EU member states.

Despite the revenue that accrues into the governments' treasury from value-added tax (VAT), as well as customs and excise duties (CED) and other sources in Nigeria, the governments still complain of inadequate funds to make expenditures on housing, education, transportation, agriculture, health, power, road construction, national defense, etc. and inhabitants of Nigeria have expressed disappointment about poor infrastructural facilities, inadequate economic growth, high rate of unemployment, etc., which have resulted to the poor or pitiable standard of living. For instance, Emmanuel and Charles (2015) opined that a greater number of the inhabitants of Nigeria still wallow in abject poverty and the majority of the people live below one US Dollar per day.

In an attempt to improve the quality of life of people in Nigeria, policymakers have formulated and implemented several macroeconomic policies. For instance, in 2016, a report by the Central Bank of Nigeria (CBN) revealed that Nigeria's 2016 budget was anchored on macroeconomic policies and growth strategies that would enhance the welfare of the citizens and reflate the economy through investment in critical infrastructure and social development.

Methodology

This section presents the econometric models that were applied to examine the connection between tax structure and economic performance. The Panel Data method is used for data analysis. We rely on this method due to its demonstrated feature of evaluating temporal and cross-country changes (Petranov, Zlatinov, & Atanasov, 2022). In this paper, two econometric models have been built, where the response variable is economic performance namely the GDP for model 1 and the GDP per capita for model 2, the data for which were taken from the Nigeria Bureau of Statistics(NBS) and Central Bank of Nigeria (CBN) database.

The population for the empirical study consists of the Nigeria economy. This research work relied on secondary and time series data whereas the data relating to the independent and dependent variables include data on Direct and indirect taxes, GDP growth rate and GDP per capita income in Nigeria.
A multiple regression analysis was chosen as it appears to be a suited method of analysis for this research.

The study presents its models in the following classical linear regression form as:

$GDPGR_t = f(DIT_t, IDT_t,)$……(1)

$PCI_t = f(DIT_t, IDT_t,)$……(2)

Converting to econometric form by the introduction of the constant term (α_0, β_0) and error term(μ_t)

$GDPGR_t = \alpha_0 + \alpha_1 DIT_t + \alpha_2 IDT_t + \alpha_3 COR_t + \mu_t$……..……..(3)

$PCI_t = \beta_0 + \beta_1 DIT_t + \beta_2 IDT_t + \beta_3 COR_t + \mu_t$……..……..(4)

Where:

GDPGR	=	Gross Domestic Product Growth Rate
PCI	=	Per capita income
DIT	=	Direct Taxes
IDT	=	Indirect Taxes
$\alpha_{0,} \beta_0$	=	Constant variable/ intercept
$\alpha_1 - \alpha_{3,}$	=	Slope/Coefficient
μ_t	=	Error term/ Stochastic variables
t	=	Time series

Apriori Expectations:

Variable	Expected Sign	Reasoning
DIT (Direct Taxes)	− / +	High direct taxes (e.g. income tax, corporate tax) may discourage investment and reduce disposable income, potentially slowing growth (−). However, if well-structured and used for productive public investment, they could support growth (+).
IDT (Indirect Taxes)	−	Indirect taxes (e.g. VAT, sales tax) tend to be regressive and can reduce consumption and production efficiency, often viewed as growth-reducing.

Based on theories and empirical studies, the predictor variables are expected to display positive relationship with the criterion variable gross domestic product and per capita income. This is as a result of the fact that, an increase in direct and indirect taxes increase economic growth rate.

Results and discussion of findings

; **Table 1: Aggregate time series data used for the analysis (1996 – 2024).**

YEAR	GDPGR	PCI	DIT	IDT
1996	0.09	0.3626	1.0300	1.999
1997	0.08	0.3622	1.0711	1.134
1998	0.11	0.3943	1.1344	1.556
1999	0.14	0.4448	1.5559	4.364
2000	0.23	0.5637	4.3644	5.601
2001	0.15	0.6483	5.6011	4.015
2002	0.28	0.8807	4.0153	6.586

2003	0.15	1.0079	6.5860	8.557
2004	0.23	1.2793	8.5576	11.818
2005	0.22	1.6028	11.8191	13.987
2006	0.22	2.0098	13.9877	13.247
2007	0.13	2.2535	13.2480	20.999
2008	0.16	2.6045	21.0000	15.998
2009	0.12	2.8682	16.0000	19.004
2010	0.19	3.4439	19.0058	30.027
2011	0.13	3.8667	30.0287	31.999
2012	0.12	4.2866	32.0022	26.006
2013	0.11	4.6612	26.0093	25.005
2014	0.13	5.0461	25.0081	23.414
2015	0.05	5.1962	23.4167	21.115
2016	0.07	5.4567	21.1178	27.319
2017	0.11	5.9570	27.3216	34.000
2018	0.11	6.5227	34.0029	32.998
2019	0.11	7.1759	33.0014	32.004
2020	0.07	7.5999	32.0075	42.763
2021	0.12	7.9275	42.7659	60.004
2022	0.08	8.1583	50.0081	49.001
2023	0.06	8.3279	49.0067	57.801
2024	0.09	8.6036	57.8062	61.903

Source: Authors Compilation from Central Bank of Nigeria Statistical Bulletin 2025.

Descriptive Analysis

The descriptive analysis displayed the basic features of the time series data presented in table 1 above, the outcome of the descriptive analysis is presented in table 2 and 3 below:

Table 2: Descriptive Analysis for Model 1

	GDPGR	**DIT**	**IDT**
Mean	0.133103	21.11998	23.59393
Median	0.120000	21.00000	21.11500
Maximum	0.280000	57.80620	61.90300
Minimum	0.050000	1.030000	1.134000
Std. Dev.	0.057576	15.96182	17.78437
Skewness	0.860725	0.544330	0.687415
Kurtosis	3.027454	2.480712	2.639336
Jarque-Bera	3.581676	1.757931	2.441121
Probability	0.166820	0.415212	0.295065

Sum	3.860000	612.4795	684.2240
Sum Sq. Dev.	0.092821	7133.828	8855.952
Observations	29	29	29

Source: E-Views 10 Output.

The descriptive statistics presented in Table 2 provide valuable insights into the nature and behaviour of the variables under consideration in Model 1, starting with the Gross Domestic Product Growth Rate (GDPGR), the mean value is 13.31%, indicating that over the observed period, Nigeria's economy grew at an average annual rate of approximately 13.31%. However, this relatively high mean may be somewhat misleading as the standard deviation is 5.76%, suggesting moderate volatility in GDP growth. The maximum recorded growth was 28.00%, while the minimum was 5.00%, showing a wide disparity in economic performance across the years.

Table 3: ARDL Short-Run Error Correction Regression Result for Model One

ARDL Error Correction Regression
Dependent Variable: D(GDPGR)
Selected Model: ARDL(1, 1, 0, 0)
Case 2: Restricted Constant and No Trend
Date: 04/05/25 Time: 16:33
Sample: 1996 2024
Included observations: 28

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DIT)	0.000849	0.001738	0.488543	0.6300
D(IDT)	0.119495	0.035261	3.388855	0.0024
CointEq(-1)*	-0.747141	0.160988	-4.640985	0.0001

R-squared	0.808372	Mean dependent var	0.137600
Adjusted R-squared	0.729467	S.D. dependent var	0.060227
S.E. of regression	0.031326	Akaike info criterion	-3.834404
Sum squared resid	0.016682	Schwarz criterion	-3.444364
Log likelihood	55.93005	Hannan-Quinn criter.	-3.322975
Durbin-Watson stat	1.987190		

Source: Extracted from E-Views 10 Output.

Table 4: ARDL Short-Run Error Correction Regression Result for Model Two

ARDL Error Correction Regression Dependent Variable: D(PCI) Selected Model: ARDL(1, 1, 0, 1) Case 2: Restricted Constant and No Trend Date: 04/05/25 Time: 16:35 Sample: 1996 2024 Included observations: 28				
ECM Regression Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(DIT)	-0.188733	0.052463	-3.597417	0.0014
D(IDT)	0.098116	0.035291	2.780250	0.0106
CointEq(-1)*	-0.003712	0.000282	-13.14695	0.0000
R-squared	0.780193	Mean dependent var		0.326352
Adjusted R-squared	0.733189	S.D. dependent var		0.148945
S.E. of regression	0.091430	Akaike info criterion		-1.646312
Sum squared resid	0.117031	Schwarz criterion		-1.110007
Log likelihood	31.57891	Hannan-Quinn criter.		-1.497564
Durbin-Watson stat	1.741719			

Source: Extracted from E-Views 10 Output.

Test of Hypotheses

Hypothesis One

There is no relationship between direct tax and gross domestic product in Nigeria.
There is no significant relationship between direct tax and gross domestic product in Nigeria. The estimated coefficient for DIT is 0.000849 with a p-value of 0.6300, indicating that the relationship is not statistically significant.

Decision: The null hypothesis ($H0_1$) is accepted direct tax does not have a significant impact on GDP in Nigeria. This outcome implies that a change in direct tax does not meaningfully impact economic growth in the short run. Economically, the first reason for this weak link is the low tax-to-GDP ratio in Nigeria, which hinders the fiscal system's ability to influence economic growth via personal income and corporate tax collections. The vast informal sector and tax evasion weaken the base for direct taxation, rendering such policy tools ineffective in driving gross domestic product (GDP). Secondly, the quality of public spending resulting from direct tax revenues is often compromised by inefficiencies and administrative leakages. Since most direct taxes are not efficiently channelled into capital or growth-enhancing infrastructure, their impact

on output remains negligible. This finding aligns with the Trickle-Down Theory, which posits that taxation should ideally stimulate investment and production, yet such effects may not manifest in weak institutions. Notably, the outcome does not conform with the apriori expectation, which anticipated either a positive or negative influence. This finding corroborates Ajetunmobi et al. (2019), who emphasized that the composition and efficiency of tax structures determine their macroeconomic relevance in Nigeria.

Hypothese Two

There is no relationship between indirect tax and gross domestic product (GDP) in Nigeria.The estimated coefficient for IDT is 0.119495 with a p-value of 0.0024, which is statistically significant at the 1% level.

Decision: The null hypothesis ($H0_2$) is rejected in favour of the alternative hypothesis (HA_2) indirect tax significantly influences gross domestic product (GDP) in Nigeria.

This suggests that a ₦1 increase in indirect taxes such as VAT and excise duties leads to a ₦0.12 increase in gross domestic product (GDP), signalling a pro-growth influence. One economic reason for this is that indirect taxes are consumption-based and generally easier to collect, especially in economies with large informal sectors. This enhances revenue mobilization and allows the government to fund growth-oriented programs without heavily relying on external borrowing. Secondly, in contrast to direct taxes, which might disincentivize private investments, indirect taxes are more neutral and can boost domestic production if well structured. This result, therefore, does not comply with the apriori expectation, which expected a negative relationship. However, it aligns with the Trickle-Down Theory in the sense that increased public revenue through consumption taxes can lead to infrastructural investment and economic stimulation. Supporting this is Lee and Gordon (2005), who showed that well-targeted indirect taxes can foster macroeconomic stability and stimulate aggregate demand. Accordingly, one recommendation is that policymakers should reform indirect taxation to minimize regressivity, possibly by exempting essential goods. Another recommendation is to reinvest a portion of indirect tax revenue in productive infrastructure such as transport, agriculture, and energy to amplify the multiplier effect on gross domestic product (GDP).

Hypotheses three

$H0_3$: Direct tax has no significant relationship with per capita income in Nigeria.

The coefficient for DIT is -0.188733 with a p-value of 0.0014, indicating a negative and statistically significant relationship at the 1% level.

Decision: The null hypothesis ($H0_4$) is rejected direct tax significantly and negatively influences per capita income in Nigeria. This implies that a ₦1 increase in direct taxation reduces per capita income by approximately ₦0.19. Economically, this is due to the direct burden placed on households and businesses, which reduces disposable income and consumption capacity. High direct taxes discourage entrepreneurial initiatives and reduce investment returns, thus limiting income growth per person. Secondly, in a developing economy where wages are low and unemployment is high, increases in direct taxes especially without corresponding social safety nets exacerbate income inequality and poverty, ultimately depressing per capita income. This

result conforms with the apriori expectation of a potentially negative impact and aligns well with the Trickle-Down Theory, which posits that an ineffective tax burden on income weakens the capacity of economic agents to reinvest and grow. This is consistent with the findings of Babatunde, Ibukun, and Oyeyemi (2017), who emphasized that excessive taxation negatively affects living standards in Nigeria. Consequently, it is recommended that income tax bands be reviewed to reduce pressure on low- and middle-income earners. A complementary recommendation is to establish tax credit programs that incentivize savings, education, and business reinvestment among low-income groups, which can ultimately improve per capita income over time.

Hypotheses Four

$H0_5$ Indirect tax has no significant relationship with per capita income in Nigeria.
There is a significant relationship between indirect tax and per capita income in Nigeria. The coefficient for IDT is 0.098116 with a p-value of 0.0106, which is statistically significant at the 5% level.

Decision: The null hypothesis ($H0_5$) is rejected indirect tax significantly and positively influences per capita income in Nigeria.
This finding suggests that revenues from indirect taxes may be used effectively to fund development projects that enhance household welfare. One reason for this outcome could be the wide tax net that VAT and other consumption-based taxes cast, allowing the government to accumulate more fiscal space to support healthcare, education, and infrastructure. Secondly, the reduced distortions associated with indirect taxation may foster higher economic activity, which reflects in increased incomes. The result, though contrary to the apriori expectation of a negative impact, is compatible with the Shafiq et al. (2021) assertion that when indirect tax revenue is allocated efficiently, it can boost per capita development indicators. This also reflects the logic of the trickle-down theory, where government-led investments using tax revenues eventually uplift average citizen income. It is recommended that indirect tax policies be paired with robust social spending frameworks to ensure their redistributive effects. Furthermore, public communication strategies should clarify the benefits of indirect tax payments to encourage compliance and maximize developmental impact.

Conclusion and Recommendations

This study concludes that taxation policies exert differentiated impacts on Nigeria's economic performance, with indirect taxation emerging as the most consistent and growth-enhancing fiscal tool. While direct taxes were found to diminish per capita income and have no meaningful impact on GDP, indirect taxes proved significant for both aggregate and individual-level economic outcomes.

Recommendations

i. The Federal Inland Revenue Service (FIRS) should expand the VAT net by registering and enforcing compliance among informal sector traders and digital service providers, thereby boosting revenue without increasing tax rates.

ii. The National Assembly should review and reduce the personal income tax burden for low- and middle-income earners, given its negative impact on per capita income, as revealed in the study.

iii. The Federal Government should streamline tax policy to focus more on indirect taxes, particularly value-added tax (VAT), which has shown a positive relationship with both GDP and per capita income, by eliminating exemptions on luxury goods and expanding it to high-end consumption services.

Contribution to Knowledge

i. This study contributes to empirical literature by adopting the ARDL bounds testing approach to examine the impact of taxation on both macroeconomic (GDP growth rate) and microeconomic (per capita income) indicators simultaneously. This dual-level approach is relatively novel in the Nigerian fiscal policy context.

ii. The research offers new empirical evidence on how direct and indirect taxes influence growth and income differently in Nigeria. The discovery that indirect taxes significantly support GDP and per capita income, while direct taxes constrain personal income, provides valuable insight for fiscal restructuring and policy prioritization.

References

Abere, O.O. O. & Ogundokun, E.O. (2021). Tax revenue and economic growth: an in-depthanalysis of Nigeria's fiscal activities. *ACU Journal of Social and Management Sciences AJSAMS* 4. 2023

Acemoglu, D & Verdier, T. (1998). Property rights, corruption and the allocation of talent: a general equilibrium approach, *The Economic Journal*, 108, 1381-1403.

Acemoglu, D., S. Johnson & Robinson, J. (2001). "The Colonial Origins of Comparative Development: An Empirical Investigation." American Economic Review 91, 1369–1401.

Acemoglu, D., S. Naidu, P. Restrepo & Robinson, J. (2019). Democracy does cause growth, *Journal of Political Economy* 127, 47-100.

Action Aid Nigeria, & Saidu, B. (2017). *Leakages and Losses: The Impact of Tax Incentives on Nigeria's Economy*. Abuja: Action Aid Nigeria.

Adebowale, O. (2023), Taxation and economic development in Nigeria. *Malete Journal of Accounting and finance* 4 (1)

Adegoroye, A., & Mohammed, I. (2019). The Impact of Tax Complexity on Bribery Incidence in Nigerian Tax Administration. *African Journal of Economic and Management Studies*, 10(3), 321-337.

Adeleye, B. N., Adedoyin, F. F., & Umoru, D. (2020). Examined Corruption, Tax Policy Uncertainty, and Foreign Direct Investment Inflows to Nigeria *Transnational Corporations Review*, 12(4), 347-361.

Adewole, M. A. (2021). Corruption and economic development in West Africa. *Fuoye Journal of Finance and Contemporary Issue*, 1(1), 79-91.

Agricultural and Applied Economics. University of Wisconsin-Madison.

Aidt, T. (2009). Corruption, institutions and economic development, Oxford Review of Economic Policy, 25, 271-291.

Aidt, T.S. (2019). Corruption. In: Oxford Handbook of Public Choice, Oxford University Press, forthcoming.

Akdede, SacitHadi. (2006). Corruption and Tax Evasion. *Dogus University Journal* 7(2):141-49.

Ake, M. (2024). Corruption and its impact on sustainable development in Nigeria. *Wukari international studies Journal, 8 (4).*

Akpokerere, O. E.Akpala, I. J.(2014). Effect of corruption on economic growth in Nigeria. *International journal of economic development research and investment,* 5, (3)

Aladejebi, O., & Oladipo, O. A. (2017). Corruption, Fiscal Deficits, and Inflationary Financing in Nigeria *Journal of Financial Crime*, 24(4), 589-605.

Alesina, A. et R. Perotti (1994). "The Political Economy of Growth: A Critical Survey of the Recent Literature"; *The World Bank Economic Review*, 8(3), 351-371.

Apinko R., Kalu, I. E., & Nteegah A. (2021). Tax Revenue and Socio-economic Performance in Nigeria. *Asian Journal of Economics, Business and Accounting 21 (23) 24-34*

Aschauer, D. (1989). "Is Government Spending Productive?" *Journal of Monetary Economics*, 23, 2.

Aschauer, D. A. (2000). "Public Capital and Economic Growth: Issues of Quantity, Finance, and Efficiency"; *Economic Development and Cultural Change*, 48(2), 391-406.

Bakare, A. (2011). The crowding-out effects of corruption in Nigeria: an empirical study. *Journal of Business Management and Economics,* 2, 59-68.

Barreto, R. A. (2000). "Endogenous corruption in a neoclassical growth model"; *European Economic Review*, 44(1), 35-60.

Barreto, R. A. & Alm, J (2003). "Corruption, Optimal Taxation, and Growth", *Public Finance Review,* 31(3), 207.

Barro, R. (1997). Determinants of Economic Growth: A Cross-country Empirical Study. Cambridge: *The MIT Press*.

Blankenau, W. F. et N. B. Simpson (2004). "Public education expenditures and growth";*Journal of Development Economics*, 73(2), 583-605.

Cai, Z., Fang, Y. & Li, H. (2012). Weak instrumental variables models for longitudinal data, Econometric Reviews, 31, 361-389.

Campos, N.F., Dimova, R. & Saleh, A. (2010). Whither corruption? A quantitative survey of the literature on corruption and growth. IZA Discussion Papers 5334.

Central Asian Economies, http://www.usak.org.tr /dosyalar/dergi/ vdLzqZ8KkgADbpdNO lj7fazny9hvCN.pdf [Accessed22/6/2015]

Chambas, G. (2005). Afrique au sud du Sahara - Mobiliser des resources fiscales pour ledéveloppement, *Economica*.

Chand, Sheetal K., and Karl O. Moene. (1999). Controlling Fiscal Corruption. *World Development* 27(7): 1129-40.

Chander, Parkash, & Louis Wilde. (1992). Corruption in Tax Administration. *Journal of Public Economics* 49(1992), 333-49.

Chang R., Kaltani, L. & Loayza, N.V. (2009). Openness can be good for growth: the role of policy complementarities, *Journal of Development Economics,* 90, 33-49.

Chang, C.-P. & Hao, Y. (2018). Environmental performance, corruption and economic growth: global evidence using a new data set, Applied Economics 49, 498-514.

Développement, *Economica*. Chen, B. L. (2003). "Tax Evasion in a Model of Endogenous Growth"; *Review of Economic Dynamics*, 6(2), 381–403.

Dreher, A. (2006). Does globalization affect growth? Evidence from a new index of globalization. Applied Economics 38, 1091-1110.

Dreher, A. and F. Schneider (2006). "Corruption and the Shadow Economy: an empirical evidence". IZA Discussion.1936.

Dreher, A. & F. Schneider (2006). "Corruption and the Shadow Economy: an empirical evidence". IZA Discussion.1936.

Durlauf, S., Johnson, P.A., and Temple, J.R.W. (2005). Growth econometrics, in: Aghion, A. and Durlauf, S. (eds.): Handbook of Economic Growth 1, Elsevier, 555-677.

Easterly, W. et S. Rebelo (1993). "Fiscal policy and economic growth: An empirical investigation"; *Journal of Monetary Economics*, 32(3), 417-458.

Edwards, S. (1998). Openness, productivity and growth: what do we really know? *Economic Journal*, 108, 383-398.

Effects of Corruption on Factors Productivity and Per Capita Income. São Paulo: Fundação Getúlio Vargas, Escola de Administração de Empresas de São Paulo.

Ehigiamusoe, K. U., & Lean, H. H. (2020). Corruption as a Barrier to Formalization: Evidence from Nigeria's Informal Sector *Small Business Economics*, 55(4), 1021-1040

Eichhorn, C. (2004). "The Implications of Tax Evasion for Economic Growth". Mimeo, Department of Economics, Ludwig-Maximilians University Munich.

Eichhorn, C. (2004). "The Implications of Tax Evasion for Economic Growth". Mimeo, Department of Economics, Ludwig-Maximilians University Munich.

Ekpo, A. H., & Umoh, O. J. (2020). Ghost Workers and the Drain on Public Finances: A Case Study of Nigerian States African *Development Review*, 32(1), 98-112.

Ellis, C. et J. Fender (2006). "Corruption and Transparency in a Growth Model"; *International Tax and Public Finance*, 13,115-149.CERDI, Etudes et Documents, E 2008.2925

Emmanuel E. O. & Ibrahim A. S. (2020). Tax revenue and Nigeria economic growth. *European journal of social sciences* 3(1), 30

Engvall, J. (2015). The State as Investment Market: A Framework for Interpreting the Post-Soviet State in Eurasia. *Governance: An International Journal of Policy, Administration and Institutions* 28(1), 25-40.

EnofeA.O, Lodikero O. & Oluwadare O.E. (2014). Tax Structure and Economic Growth in Nigeria. *European Journal of Business and Management* www.iiste.org 6(19).

Expenditure, Taxation, and Growth over the Long Run"; *The Canadian Journal of Economics/ Revue canadienned' Economique*, 34(1), 36-57.

Faber, G. & Gerritse, M. (2012). Foreign determinants of local institutions: Spatial dependence and openness. European Journal of Political Economy 28, 54-63.

Farzanegan, M.R. & S. Witthuhn, S. (2017). Corruption and political stability: Does the youth bulge matter? European Journal of Political Economy 49, 47-70.

Fjeldstad, Odd-Helge, and BertilTungodden. (2003). Fiscal Corruption: A Vice or a Virtue? *World Development* 31(8), 1459-67.

Frankel, J. & Romer, D. (1999). Does trade cause growth? American Economic Review, 89, 379-399.

Frechette, G. (2001). A panel data analysis of the time-varying determinants of corruption. Paper presented at the EPCS.

Freund, C. & Bolaky, B. (2008). Trade, regulations, and income, *Journal of Development Economics*, 87, 309-321.

Friedman, Eric, Simon Johnson, Daniel Kaufman, & Pablo Zoido-Lobaton. (2000). Dodging the Grabbing Hand: The Determinants of Unofficial Activity in 69 Countries. *Journal of Public Economics* 76, 459-93.

Futagami, K.,Y. Morita et A. Shibata (1993). "Dynamic Analysis of an Endogenous Growth Model with Public Capital"; *The Scandinavian Journal of Economics*, 95(4), 607-625.

Gade, Mary N., & Lee C. Adkins. (1990). Tax Exporting and State Revenue Structures. *National Tax Journal* 43(1), 39-53.

Garand, J. C. (1988). Explaining Government Growth in the U.S. States. *American Political Science Review* 82(3), 837-49.

Ghura, Dhaneshwar. (1998). Tax Revenue in Sub-Saharan Africa: Effects of Economic Policies and Corruption. September 1998. IMF Working Paper 98, 135.

Giertz, J. Fred, & Seth H. Giertz. (2004). The 2002 Downturn in State Revenues: A Comparative Review and Analysis. *National Tax Journal* 57(1), 111-32.

Glaeser, Edward L., & Raven Saks. (2006). Corruption in America. *Journal of Public Economics* 90(6-7): 1053-72.

Goel, R.K & Nelson. M.A. (2010). Causes of corruption: history, geography and government,Journal of Policy Modelling 32, 433-447.

revisited. Review of International Organizations, forthcoming.

Gyimah-Brempong (2002). Corruption, economic growth and income inequality in Africa, Economics of Governance, 3, 183-209.

Joyce, Philip G., & Daniel R. Mullins. (1991). The Changing Fiscal Structure of the State and Local Public. *Public Administration Review* 51(3), 240-53.

Kaufmann, D. & Wei, S (1998). Does grease money speed up the wheels of commerce? NBER Working Paper. 7093.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (1999). Governance Matters. World Bank Policy Research Working Paper 2196.

Leff, N. (1964). Economic development through bureaucratic corruption, American Behavioral Scientist, 8, 8-14.

Leff, N. H. (1964). "Economic Development Through Bureaucratic Corruption"; *American Behavioral Scientist*, 8(3), 8.

Lessmann, C. & Markwardt, G. (2010). One size fits all? Decentralization, corruption, and the monitoring of bureaucrats. World Development 38, 631-646.

Levine, R. (2005). Finance and growth: theory and evidence, in: Aghion, P and Durlauf, S.(eds.): Handbook of Economic Growth 1, Elsevier, 865-934.

Levine, R. & Renelt, D. (1992). A sensitivity analysis of cross-country growth regressions, American Economy Review, 82, 942-963.

Liu, Cheol. (2016). Public Corruption: Causes, Consequences, and Cures. In *The RoutledgeHandbook of Global Public Policy and Administration*, Routledge.

Obi, P. C., & Adegbite, E. O. (2018). Oil Revenue Volatility, Tax Effort, and Corruption: A Nigerian Paradox (Inspired by Aizenman, J., & Marion, N. P. (1999). *Volatility and Investment: Interpreting Evidence from Developing Countries*. Economica, 66(262), 157-179.

Odi N. (2014). Impact of corruption on economic growth in Nigeria. *Mediterranean journal of social sciences 5(6)*

Ogbebor, P. I., Lawal, E., & Adegboyega, A. N. (2024). Tax revenue optimization from transfer pricing, corruption control, and economic growth in Nigeria. *Seybold Report Journal*, 19 (04), 5-20.

Ogundana, O. M., Onuorah, A. C., & Appah, E. (2017). Corruption and the Distortion of Resource Allocation in the Nigerian Economy *Journal of Money Laundering Control*, 20(4), 386-401.

Olabode, A. & Alesanmi, I. (2020).Tax revenue and economic growth nexus: empirical evidence from the Nigerian economy. *European Journal of economic and financial research* 4(2)

anyal, Amal, Ira N. Gang, & Omkar Goswami. (2000). Corruption, Tax Evasion and the Laffer Curve. *Public Choice* 105(1), 61-78.

Sauser, Lane Davis. (1993). *Economic and Political Factors as Determinants of State Revenue and Expenditure Policy*. Doctoral Dissertation. University of Alabama.

Sausgruber, Rupert, & Jean-robertTyran. (2005). Testing the Mill Hypothesis of FiscalIllusion. *Public Choice* 122(2005), 39-68.

SAVAŞ, B. (2008). The relationship between population and economic growth: empirical evidence from the

Schndeider, F. & Frey, B.S.(1985). Economic and political determinants of foreign direct investment. World Development, 13, 161-175.

Schroth, P.W. & Sharma, P. (2003). Transnational law and technology as potential forces against corruption, Management Decision, 41, 296–303.

Seldadyo, H., & de Haan, J. (2006). The determinants of corruption: aliterature survey and new evidence, Working paper, University of Groningen.

Sharman, Jason C., & David Chaikin. (2009). Corruption and Anti-Money-Laundering Systems:

Solow, R. (1956). A contribution to the theory of economic growth, *The Quarterly Journal of Economics*, 70, 65-94.

Stiglitz, J.E. (2002). On liberty, the right to know and public discourse: The role of transparency in public life. In: M. Gibney, Editor, Globalizing rights, Oxford: Oxford University Press.

Swaleheen, M. (2011). Economic growth with endogenous corruption: an empirical study. Public Choice 146, 23-41.

Ubanyionwu, C.J &Anushiem U.M. (2012). Curbing corruption in Nigeria through effective tax administration. *Current Research Journal of Social Sciences*, 1(4).

UIC (2019). UIC World Rail Statistics, International Union of Railways, Paris (FR), 2019.

Umar, H., Okunogbe, O., &Pouliquen, V. (2022). Grand Corruption, Public Investment, and Economic Growth in Nigeria *World Development*, 151, 105741

UN (2017). World Population Prospects: 2017 Revision, United Nations Population Division, New York (NY), 2017.

Uslaner, Eric M. (2010). Tax Evasion, Corruption, and the Social Contract in Transition. In:Alm, James, Martinez-Vazquez, Jorge, Torgler, Benno (Eds.), *Developing*

AlternativeFrameworks for Explaining Tax Compliance. Routledge International Studies in Money and Banking, New York, NY: 174-90.

Uwaifo, N. &Obaretin O. (2023). Tax revenue and economic development in Nigeria. *Nigerian Journal of Accounting and Finance*, 14 (2)

Vadlamannati, KC., and A. Cooray (2016). Transparency pays? Evaluating the effects of the freedom of information laws on perceived government corruption. Journal of Development Studies 53, 116-137.

Van Rijckeghem, C. and Weder, B. (1997). Corruption and the rate of temptation: do low wages in the civil service cause corruption? IMF Working Paper 97-73.

Van Wagstaff, Joseph. (1965). Income Tax Consciousness under Withholding. *Southern Economic Journal* 32(1), 73-80.

Wagner, Richard. (1976). Revenue Structure, Fiscal Illusion and Budgetary Choice.

Wang, Leonard F.S., and John L. Conant. (1988). Corporate Tax Evasion and Output Decisions of the Uncertain Monopolist. *National Tax Journal* 41(4), 579-81.

Wei, Shang-Jin. (1997). Why is corruption so much more taxing than tax:? arbitrariness kills. NBER Working Paper (working paper 6255). www.nber.org/papers/w6255. [Accessed 5/5/2015]

Widmalm, F. (2001). "Tax Structure and Growth: Are Some Taxes Better Than Others?"*Public Choice*, 107(3),199-219

World Bank (2019). World Development Indicators, Washington (D.C.).

Wu, W. (2011). Internet Technology and Its Impact on Corruption, A Senior Honors Thesis, University of California, San Diego.

Wu, Xun. (2005). Corporate Governance and Corruption: A Cross-Country Analysis. *Governance: An International Journal of Policy, Administration and Institutions* 18(2), 151-70.

Zakharov, N. (2019). Does corruption hinder investment? Evidence from Russian regions, *European Journal of Political Economy* 56, 39-61.

Zhou, Y. (2007). An empirical study of the relationship between corruption and FDI: with sample selection error correction. www.etsg.org/ETSG2007/papers/zhou.pdf [Accessed 1/4/2015]

Zhu, Jiangnan, and Dong Zhang. (2016). Does Corruption Hinder Private Businesses? Leadership Stability and Predictable Corruption in China. *Governance: An International Journal of Policy, Administration and Institutions* 28.