THE EFFECT OF DIRECT AND INDIRECT TAXES ON ECONOMIC GROWTH: EVIDENCE FROM NIGERIA

ABATA, Matthew Adeolu, OSAMOR, Ifeoma Patricia, ELLUH, Chinyere Clareth*

Department of Accounting, Faculty of Management Sciences, Lagos State University, Lagos State, Nigeria

*Corresponding Author

ABSTRACT

Aim/Purpose: The tax structure and reforms that could give the optimal benefit is not always easy to determine, this is responsible for different tax laws, structures and reforms that are rather harmful to the economic growth. Therefore, the study examines the effect of direct and indirect taxes on economic growth: evidence from Nigeria.

Design/methodology/approach: The study adopted Ex-Post Facto research design. Secondary data was collected from Central Bank Statistical Bulletin between 1995 and 2021. Descriptive statistics, ARDL regression analysis, and post estimation tests were used to analyzed the data.

Findings: The study revealed that direct tax (LPPT & LCIT) had significant negative effect on economic growth. It also revealed that indirect tax (LVAT) had positive and significant effect on economic growth in Nigeria while LCED was found insignificant. The study therefore concluded that both direct and indirect taxes had significant effects on economic growth.

Research Implications/limitations: Based on the findings, the study recommended that Value Added Tax(LVAT) should be encouraged such that more goods are brought into the VAT list in order to expand the tax net in Nigeria. Meanwhile, excise duties on local manufacturing firm sourcing for raw materials abroad should not be excessive to prevent local firms' crowd out. The research is limited by the data available to the researcher.

Originality/value/contribution: unlike some other studies which say otherwise, this study contributes to the literature by establishing that both direct and indirect taxes can contribute positively to economic growth in Nigeria if properly configured, monitored and controlled.

KEYWORDS: *Direct Taxes, Indirect Taxes, Economic Growth, Valued Added Tax (VAT), Custom and Excise duty (CED).*

1. INTRODUCTION

The growth rate of every nation is a function of the nation's ability to harness internal and external revenue sources. Nations with effective and efficient tax system are usually ahead of others in economic growth and development since the revenue quantum generated from the system are somewhat sufficient to provide the needed infrastructural facilities that trigger-off growth and development. Nations of the world are faced with huge expenditures among which include the provision of social amenities, security of lives and properties, defense from internal and external aggression and many more. To be empowered to handle these, huge fund is needed. It is therefore the duty of government to source for this revenue through all the means available to her. No wonder, International Monetary Fund [IMF] (2012) noted that developing countries, if they must come out of poverty must engage in aggressive internal revenue generation to provide the needed infrastructure other than dependence on Foreign Aids and Exchanges.

Among the internal revenue sources available to most developing countries include taxes, mineral resources and other natural endowment. Tax is described as imposed contribution on the citizen to the government to support her numerous developmental projects. Taxation though it may not generate revenue in great quantity especially

in the developing countries due to tax administration issues, still it remains a predictable and consistent source of financial inflows to the government, (Abata, 2014; Ukpabi, 2019). The emphasis here is on strengthening the tax structure to harness more revenue from the existing tax unit other than tax administration.

Meanwhile, Direct taxes refer to tax levied on incomes, profits of all kinds, property, dividends, commission, rents, salaries, royalty and others. While indirect taxes are levied on consumption of certain goods and services. Suna, Metehan and Fadime (2019) noted that taxes are described as indirect if the burden can be shifted from the initial tax payer to others while direct taxes are those whose burden cannot be shifted from the original payer to others. However, when tax event occurs occasionally and not regular in nature, then such tax is classified as indirect, in other words, taxes charged on wealth and revenues are direct taxes such as personal Income Tax (PIT) and Companies Income Tax (CIT) whereas taxes charged on expenditures such as VAT, CED, Stamp Duties, Communication Taxes etc are indirect taxes, (Ozdemir, 2009; Suna, Metehan & Fadime 2019; Ayeni & Omodera, 2022). The need to examine the impact a particular tax or taxes would have on economic growth before implementing it is more crucial as different tax reforms have different impact on the economy (Ozdemir, 2009; Lyndon, & Paymaster,2016; Omodero & Dandago, 2019; Adebiyi, Bamfo, Isiadinso, 2019; Nwachukwu, Nwoha & Inyama, 2022). This is to say that not all types of taxes have positive impact or supports economic growth. However, taxes if properly managed have the capacity to generate huge revenue to government and impact on the GDP positively.

Unfortunately, Nigeria as a nation is far from harnessing the benefits of taxes as fiscal tool to increase the revenue generation of the nation, so as to speed up the rate of economic growth and development. Despite the fact that several variables shape economic growth, the role of tax revenue remains pivotal and indispensable because tax revenue is a major player in the economy and growth of a nation. This accounts for poor developmental rate, poor commercial activities, poor infrastructural facilities and retarded growth rate of Nigerian Economy. Several other factors such as bad governance, poor fiscal policies, corrupt practices, poor attitude of tax personnel, lack of accountability, non-existence of data base, illiteracy and lack of proper enlightenment of tax laws, and tax benefits restricts the success rate of tax revenue in Nigeria. Studies from several researchers on the effect of tax on economic growth abound. Though the results of such studies revealed some degree of relatedness yet are varied, inconsistent and conflicting. While some found that tax encourages economic growth; others show evidence that taxes reduce output, savings and investment and as such impact negatively on economic growth; whereas others argue that there is no relationship between taxation and economic growth. The need to resolve these puzzles and give a concrete view and evidence in favour or against the argument presents a gap which this study intends to cover. The study therefore wants:
i)   To determine the effect of direct taxes on economic growth(GDP)
ii)   To examine the effect of indirect taxes on economic growth (GDP)

2. CONCEPTUAL REVIEW

Taxation is a fiscal policy tool adopted by government to generate revenue, control production and consumption and encourage desired economic activities. Taxation apart from being a means of income redistribution, is equally a medium to achieve micro and macroeconomic objectives. Taxation as a compulsory levy or contribution by citizen of a state is a major source of revenue to government in the developed countries though Nigeria has not been able to find herself in this category. Taxation is an avenue through which revenue is sourced by government to enable them carry out their daily activities. This suggests that taxation aids the function of government and is positively related with government plans, (Sherman, 2017; Eke, 2018; and Kenton, 2019). This compulsory contribution by citizens on their individual earnings, groups or corporate profits, properties and businesses no doubt are used to defray government expenditures, provide a veritable tool to mobilize the economic resources of a nation for onward economic growth, (Okoye, 2014;Abata, 2016; Asaolu, Olabisi, Akinbode, & Alebiosu,2018).Taxation is a compulsory levy on the income of individuals, corporate bodies, property or citizen of a country as her contribution to the economic growth of the country. Taxation is equally described as government fiscal tool to channel the behavior of citizens to a desired pattern to achieve a particular goal, (Okon, 2014; Etale & Bingilar, 2017; Asaolu, 2018; Nwachukwu, Nwoha & Inyama, 2022: Ayeni & Omodera, 2022).
Taxation system in Nigeria has been divided along two sides; the direct and indirect taxes. Direct taxes cover charges on income from individual, corporate body, property and dividend, such as Personal income tax (PIT), Company Income tax (CIT), Petroleum Profit Tax (PPT), Capital Gain Tax (CGT) etc. As the name implies, direct taxes exact pressure on the personal incomes of individuals, corporate bodies and other subjects were these taxes are charged. Tax liabilities therefore becomes due if profits are made by individual, business, companies,

petroleum product is sold, dividend is paid and much more. Asaolu et al (2018) confirmed that CIT is due for payment by any company in Nigeria if profit accrues, derived from, or brought into Nigeria in respect of the company. In the same vein Petroleum Profit Tax (PPT) is due when a company disposes off chargeable oil and gas. This is in corroboration with Fasoranti, (2013) who posits that PPT becomes due when income is generated by oil and gas companies through disposal from their operational activities. Indirect taxes are usually compulsorily levied on goods and services. These taxes are equally described as consumption taxes, (Abata, 2014). Asaolu,et al (2018) opine that VAT is a tax on Vatable goods and services which can only be avoided by avoiding the use of vatable good and services. VAT in Nigeria has undergone several reforms. The latest reform on tax is the tax reforms 2020 which increased VAT from 5% to 7.5%. It is important to state at this point that tax system in Nigeria over the years has been characterized by inefficient collection methods, corrupt practices and loopholes created by tax laws. These backdrops adversely affect the economic growth of the nation. This situation is corroborated by Boyle, (2020) who argued that the success or failure of a tax system to generate maximum revenue for government is the function of proper management, interpretation and implementation of tax laws. As much as it is inevitable that taxes provide revenue to the government, it must be noted that there is no one-size- fit-all solution to tax problems in terms of tax structure and tax reforms. Effort must be made to borrow a leaf from successful countries of the world for a successful pattern, (Akitoby, 2019; Ayeni & Omodera, 2022). A tax reform with political mandate to tackle low level of tax payment by providing a simple tax system with limited tax rates and exemptions, possibly making use of goods and services taxes should be preferred to personal taxes, (Ibe, 2020).

Tax Revenue and Economic Growth
Hodge (2015) noted that a good tax policy should be neutral to economic decision making, transparent, simple, stable and must not prevent economic growth. The drivers of Economic activities are people decisions and willingness to work and invest capital. Also the prices of labour and capital affect their deployment. Tax play a vital role to determine if people would work and deploy capital, because they want to know what their return would be on their work and capital invested and these are affected by taxes.

Tax rate determines how much people will want to work or invest since it affects how much of the individual's income or business profit that they take home. It is evidence that corporate tax is harmful to economic growth when compared with other types of taxes. This is not far from the fact that capital is sensitive to taxation because of its mobility. Capital can be easily moved from one jurisdiction of high tax to a tax heaven for investment but this is not a case of personal income of individual whose salary or earnings is taxed from source. The individual therefore may not necessarily relocate his residence or work place to reduce his tax burden. Therefore, low tax burden helps keep our corporate bodies and their businesses which transient to increased output, job creation and economic development in the long-run, (Entin, 2017; Hodge, 2016; Nwachukwu, Nwoha & Inyama, 2022). The burden of corporate tax is actually borne by the workers inform of low wage package, and the society because the social responsibility of the corporation is ignored when their gains are siphoned by tax. However, the benefits of low tax on corporations are seen when corporate bodies and big business expand their existing businesses, invest in new projects thereby creating jobs, carrying out social responsibilities that help develop their host communities as a result of friendly tax levy. In contrasts when these corporate bodies and big business close down their existing business or open up site and carry out projects in other areas, city or country because of High taxes. This situation completely stifles or hurt economic growth. Furthermore, low corporate tax leads to increase in worker's pay package and increase the living standard of the lower and middle class.

Either developed or developing countries, the place of tax revenue in economic growth and development remains pivotal and indispensable from the above analogy. No wonder Stoilova, (2017); Asaolu,et al (2018); Anilika, (2019); Barton (2019); Ibe (2020) and Nwachukwu, Nwoha & Inyama, (2022)noted a strong relationship between tax structure and economic growth and development of the nations. In the same manner, the level of economic development impacts strongly on the tax base of every country. Effectiveness and efficiency must be applied therefore to tax system to achieve the desired impact on economic growth. Economic growth which is the expansion rate of a country's Gross Domestic Product also explains the level of supplies and economic activities as well as standard of living of the citizens. However, tax revenue no doubt impact on economic choices but not all taxes impact positively on economic growth. This is because while some taxes (direct taxes) would raise after-tax return to working, saving and investment leading to a rise in economic activities through substitution effects, others would lead to after-tax income people gain from their current activities which consequently reduces their desire to work hard, save and invest, through income effect. Sometimes one is compelled to believe that

broadening tax bases and reducing or eliminating tax expenditures raises effective tax rate that both individual and corporate bodies operate in. Tax bases broadening releases funds for reallocation from the sectors currently favoured to sectors that have higher economic returns to build the economy of the nation. These supports the work of Gale & Samwick, (2014) who argued that tax policy has the potential to raise economic growth, but there is no guarantee that all taxes will improve economic performance. Furthermore, Asaolu, etal. (2018) confirmed that VAT and CED have significant positive effect on economic growth while CIT have negative effect on GDP. Therefore, a growth inducing tax policy must be one which offers large positive incentives that encourages hard work, saving and investment; one with small but positive or even negative income effect that will encourage new economic activities that will produce new output and one that will reduce distortions across economic sectors and consumption and income level.

2.2 Theoretical Review

Several theories address taxation and its relevance to societal growth and development. However, this study anchors on two theories as lens to x-ray this study. Laffer Curve Theory was developed by Arthur Laffer to demonstrate the relationship between tax rate and the quantity of revenue collected by government. Laffer using the curve argued that in some cases tax cuts results to increase in the total tax revenue with an optimal tax rate that maximizes total revenue for the government. Laffer noted that at the point of higher tax rates along the curve, then economic activities will be discouraged, work, investment and production will be stifled and this will reduce total revenue. At this point a reduction or tax cut will stimulate economic incentives as well as tax revenue. Laffer curve has been useful as a theory to support tax cut but have suffered two major criticisms on the bases of simplistic assumption and on economic ground that government revenue might not be optimal always. In a nut shell, Laffer curve tries to explain the rationality of human behavior to adjust to incentives offered by tax rates. To the extent that high incomes tax rates reduces the incentive to work and invest while low income tax rate on the other hand encourages incentives to work, save and invest.

Trickle-Down theory was first developed by Will Rogers (1900s), during President Herbert Hoovers. The theory emphasized that breaks and benefits for corporations and wealthy people will trickle- down to everyone in the society. The theory advocates tax breaks for income and capital gains along with other financial benefits to big business, investors and entrepreneurs as anti-dots for speedy economic growth. The theory is based on the premise that growth comes mostly from the wealthy people who has the resource, skills and well-withal to promote productivity and every member of the society benefits from growth. A policy is described as trickle-down if such policy disproportionately favours the rich and large businesses in the short-run and in the long-run boost the living standards of all individuals. Both the supply-side economists and demand-side economist support trickle-down economics or theory. While the demand-side believe that the wealthy corporation and entrepreneurs need subsides and tariffs to safeguard employees and increase spending, supply-side theorist are of the opinion that low tax for large corporations and high income brackets as well as less regulation would spurs the wealthy to increase output thereby creating more jobs. Trickle-down theory however has been criticized for placing the wealthy on a more advantage over the low and middle class, thereby expanding the inequality between the poor and the rich. Several economists are of the opinion that additional income to the wealthy may end up in stock buy backs or save the money rather than spend it, (Kenton, 2019).

2.3 Empirical Review

Several Empirical literatures were reviewed in line with the effect of different types of taxes on economic growth. Arowoshegbe, etal. (2017), examined the relationship between taxes and economic growth. Secondary data were gathered for the period covering 1995-2015, from FIRS and statistical bulletin. Ordinary Least Square (OLS) was applied, and the study found that direct taxes exact more significant positive effect on economic growth in Nigeria than indirect tax. This is in contrast of Stoilova, (2017) who examined tax structure and economic growth. The study covered the period of 1996 and 2013 and adopted estimation model to diagnose the variables. The study covered 28 EU Countries. The Study found that PIT has Positive impact on economic growth measure via GDP, while CIT negatively impacted on GDP.

Furthermore, Ali etal. (2018) investigated the impact of Tax revenue on economic growth. The study adopted secondary data and data were gathered via FIRS and statistical Bulletin and Central Bank of Kenya, covering the period between 1980 and 2007. OLS was adopted to x-ray the variables. The study found that domestic tax has positive significant impact on economic growth but grants does not. Also, Khumbuzile & Shlalefang, (2018) examined the impact of taxation on Economic growth. The study which was carried out in South Africa, gathered

secondary data covering the period between 1981 to 2016. The study adopted Auto Regression Distributed Lag (ARDL) as statistical tool and found that Tax (PIT & CIT), trade and openness are co-integrated with economic growth in South Africa, The result shows that fiscal policy is important for sustainable economic growth.

However, Ojijo & Olushola, (2018) studied taxation and economic growth in a Resource-Rich nation. The study adopted secondary data, and data were source from FIRS and Statistical Bulletin covering the period between 2003 and 2016. OLS used applied on the variables and the study found that though taxation has significant impact on GDP the proportion of tax contribution to GDP falls short of optimal level in economic activities and output. Asaolu, etal. (2018) examined the tax revenue and economic growth. The study adopted secondary data and data were sources from FIRS and CBN. The study covered the period between 1994- 2015. ARDL was used to diagnose the variables. The study found that VAT and CED have significant positive relationship with GDP at 5% level, while CIT has negative significant relationship with economic growth. But PPT had no significant relationship with economic growth. Meanwhile, Tabet & Onyeukwu (2019) examined the effect of multiple taxation and SMEs Financial Performance. The study adopted primary data. 200 Questionnaires were issued to respondents, resident in Abuja. ANOVA use adopted to estimate the variables. The study found that multiple taxation is harmful to economic growth of SMEs and Economy in general. Ukpabi, (2019) examined the impact of indirect taxation on economic growth in Nigeria. The study which adopted several diagnostic checks like times series, unit check, co-integration, OLS ECM and others found that VAT had a positive significant relationship with economic growth while CED had a negative but significant relationship with economic growth.

Taufik, Abdul, Jasmine, Norzianana & Salwa, (2022) examined the impact of direct and indirect taxes on economic development, comparing the developing and developed countries. the study compared previous studies of 90 and 47 developing and developed countries respectively, with data covering year 2000 to year 2020. Fixed effect, random effect and generalized Least Square techniques were employed and the study and the study found that tax structure in developing countries does not support the countries' economic growth whereas in the developed countries, there is a strong relationship between direct taxes and economic growth. Ayeni, & Omodero, (2022), examined Tax revenue and economic growth in Nigeria. Secondary data was collected from CBN and FIRS covering the periods between 2000 to 2021. Vector Error Correction model was adopted to evaluate the variables and the study found that PPT and VAT have positive relationship with GDP, while CIT was found to have significant negative effect on economic growth. Nwachukwu, Nwoha & Inyama, (2022) reviewed the effect of taxation on economic growth in Nigeria. Ex post facto was adopted, secondary data was obtained from CBN statistical bulletin. OLS was used to regress the data, and the study revealed that PPT, VAT, CIT and PIT all have significant positive effect on GDP.

3.RESEARCH METHODS

The study adopted Ex-Post Facto Research design. It was a numeration of the entire Nation, using Gross National product. Dependent variable was Economic Growth, proxied by GNP while the independent variables are direct tax proxied by Petroleum Profit Tax (PPT) and Companies Income Tax (CIT), and Indirect tax proxied by Value Added Tax (VAT) and Custom and Excise duty (CED). Secondary data were sourced from FIRS and CBN Statistical Bulletin for PPT, CIT, VAT, CED and GDP for the whole companies and the whole nation between the time period of 1992 – 2021. ARDL was used to estimate the parameters to unveil the effect of direct and indirect taxes on the economy growth of Nigeria. Descriptive Analysis, unit root test and co-integration tests were conducted to ensure the robustness and validity of the model.

3.1 Model Specification

The generalized form of ARDL(p,q) model is specified as;

$$Y_t = \gamma_0 i + \sum_{i-1}^{p} \delta i \ Y_{t-i} + \sum_{i=0}^{q} \beta'_i X_{t-i} + \ \varepsilon_{it} \qquad \text{eqn 1}$$

Where

Y'_t is a vector and the variables in (X'_t) ´ are allowed to be purely I(0) and I(1) or co-integrated; β and δ are coefficients while γ is a constant; i=1, …, k; p, q are regarded as optimal lag orders; ε_{it} is a vector of the error term. This is the unobserved zero white noise vector process expected to be serially uncorrelated or independent from the explanatory variables in the model.

The long run Error correction model specification after substitution of the current variables into eqn 1 becomes;

$$\Delta lnRGNP_t = \beta_0 + \sum_{i-1}^{p}\beta_{1i}\Delta lnRGNP_{t-i} + \sum_{i=1}^{q}\beta_{2i}\Delta lnPPT_{t-i} + \sum_{i=1}^{q}\beta_{3i}\Delta lnCIT_{t-i} + \sum_{i=1}^{q}\beta_{4i}\Delta lnCED_{t-i} + \sum_{i=1}^{q}\beta_{5i}\Delta lnVAT_{t-i} + \gamma ECT_{t-1} + e_t \qquad \text{eqn2}$$

Note:

lnRGNP	= Log of Real Gross National Product at time t
lnPPT$_t$	= Log of Petroleum Profit Tax at time t
lnCIT$_t$	=Log of Companies Income Tax at time t
lnCED$_t$	= Log of Custom and Excise Duties at time t
lnVAT$_t$	=Log of Value Added Tax at time t
β_0	=Intercept term
e_t	= Error term
Δ	= is the change Operator
γ	= $(1- \sum_{i-1}^{p}\delta i$) Speed of adjustment parameters with a negative sign
ECT	= $(ln$RGNP$_{t-1} - \theta X_t)$, this represent the error correction term
θ	= $\dfrac{\sum_{i=0}^{q}\beta_i}{n\alpha}$ represent the long run parameter

$\beta_{1i}, \beta_{2i,}\ \beta_{3i}$ = Estimation Parameters that represent the short run dynamic coefficient of the models adjustment long run equilibrium

4. 0 EMPIRICAL RESULTS
4.1. Descriptive Analysis
Table 1 showed the descriptive statistics of all the variables studied. The series (GNI, PPT, CIT, CED and VAT) had positive skewness with values of 0.42, 0.54, 0.80, 2.74 and 0.70 respectively. This indicated that the data were non-symmetrical in nature. The kurtosis of the series GNI, PPT, CIT, CED and VAT with values 1.59, 2.09, 2.10 and 2.00 respectively were less than three (kurtosis <3), this was indicative of platykurtic distribution, (less than normal) with the exception of CED =10.34 which was greater than 3, indicative of a leptokurtic distribution. The Jarque-Bera statistics with probability values of the variables showed GNI=0.18>0.05, PPT=0.28>0.05, CIT=0.11>0.05 and VAT=0.15>0.05 indicated that the series were normally distributed, while CED=0.000<0.05 is not normally distributed.

Table 1 Showing Result of Descriptive Analysis

	GNI	PPT	CIT	CED	VAT
Mean	2.770011	1226940.	426650.8	253752.8	353955.8
Median	2.400011	1018673.	127550.0	184915.0	168800.0
Maximum	4.880011	3201319.	1409214.	1370000.	1100000.
Minimum	1.420011	42858.00	21878.00	37364.00	20761.00
Std. Dev.	1.290011	957194.2	464429.8	281054.9	345373.8
Skewness	0.422536	0.544167	0.809003	2.746335	0.706383
Kurtosis	1.599877	2.099404	2.102164	10.34365	2.003774
Jarque-Bera	3.343112	2.494430	4.280069	105.1232	3.735466
Probability	0.187954	0.287304	0.117651	0.000000	0.154473
Sum	8.320012	36808192	12799525	7612584.	10618675
Sum Sq. Dev.	4.860023	2.66E+13	6.260012	2.290012	3.460012
Observations	30	30	30	30	30

Source: Authors Computation using EVIEWS 10.

4.2. Test for Unit Root.
The study adopted Augmented Dickey-Fuller and Philips Perron test to examine the stationarity (unit root) of all variables on table 2. Petroleum Profit Tax(PPT), Company Income Tax(CIT), Customs and Excise Duties(CED) and Value Added Tax(VAT) were stationary at first difference $I(1)$ while Real Gross National Product(RGNP) was stationary at levels $I(0)$. Since the probability values were less than 0.05(5%) and the absolute values of the ADF and PP Statistics were higher than their respective 5% Mackinnon critical values, this suggested that the variables contained unit root but stationary after first difference $I(1)$. The null hypothesis was not rejected at levels for all the explanatory variables, however, it was rejected at first difference. This was indicative that the model was stationary at levels $I(0)$ and first difference $I(1)$. Since the variables were stationary at levels and at

first difference, there was need for further analysis to determine if there existed a long run relationship between direct and indirect taxes and economic growth using the co-integration test.

Table 2 Unit Root Test Result

Variables	ADF Statistic	5% Critical Value	Levels	First Difference	PP Statistic	5% Critical Value	Levels	First Difference
GNI	-11.61011	-3.065585	0.0000***	0.0591	-4.880957	-3.622033	0.0037***	0.0712
PPT	-4.753498	-2.971853	0.5246	0.0007***	-5.839178	-2.971853	0.6618	0.0000***
CIT	-5.450910	-2.976263	0.1079	0.0001***	-4.788958	-2.971853	0.9640	0.0007***
CED	-5.790233	-2.976263	0.9975	0.0001***	-4.785330	-2.971853	0.3733	0.0007***
VAT	-4.084895	-2.971853	0.9519	0.0038***	-3.781843	-2.971853	0.9587	0.0080***

Authors Computation 2021, Using EVIEWS 10.

4.3 Co-integration Test:

Following the findings above that the series were $I(0)$ and $I(1)$ respectively, (mixed integrated), the study employed Bounds test. The co-integration test for direct and indirect taxes in table 3 revealed that the null hypotheses of no co-integration between the variables were rejected since the F test statistics (3.202874) was less than the I(0) and I(1) bounds. This implied that there was no co-integration in the direct and indirect tax model with GNI hence a short run analysis was done.

Table 3: ARDL Cointegration F- Bounds Test Result

Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	$I(0)$	$I(1)$
F-statistic	3.202874	10%	2.45	3.52
K	4	5%	2.86	4.01
		2.5%	3.25	4.49
		1%	3.74	5.06

Authors Computation 2021, using Eviews 10

4.4 Lag Length Criteria

An ARDL regression analysis was adopted because the data were integrated at mixed order, i.e. $I(0)$ and I(1), while Akaike Information Criterion (AIC) was used to select the Lag length. However, the lag length for the analysis was determined using the VAR lag length criteria. The maximum lag length selected by information criteria depicts optimal lag length of two (2) except Log linear which was not selected at lag 2. Since the AIC was used for lag selection of the unit root, therefore Akaike Information Criterion (AIC) prediction was adopted for the purpose of our estimation hence, lag length 2 was selected

Table 4.: VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-2257.491	NA	1.05e+64	161.6065	161.8444	161.6792
1	-2137.668	188.2924	1.25e+61	154.8335	156.2608	155.2698
2	-2075.741	75.19796*	1.08e+60*	152.1958*	154.8126*	152.9958*

* indicates lag order selected by the criterion

4.5 Test of hypotheses
4.5.1 Effect of direct tax on Gross Domestic product

The ARDL Regression result of direct tax (LCIT) was found to be negative and statistically significant. LPPT was found to be negative and significant. The coefficient of LCIT at lag 1 (-0.103639) was an indication that holding other variables constant, a 1 per cent increase in Company Income Tax (LCIT), would lead to 0.10 percent decreases in economic growth in Nigeria. The p=0.0008< 0.05 indicated that the null hypothesis of no significant effect was rejected and concluded that LCIT had significant effect on GDP. Also, the coefficient of LPPT (-0.043532) was an indication that a 1 percent increase in petroleum profit tax (LPPT) would on the average lead

to 0.04 percent decrease in economic growth in Nigeria. The p=0.0190<0.05 indicated that the null hypothesis of no significant effect was rejected and concluded that LPPT had significant though negative effect on GNP.

4.5.2 Effect of indirect taxes on Gross Domestic Product

Table 5 revealed that Value Added Taxes (LVAT) had positive and statistically significant effect on Gross National Product (GNP). The coefficient of LVAT (0.179977) was an indication that a 1% increase in Value Added Tax (LVAT) will on the average lead to 0.17 per cent increase in economic growth. This also suggested that an increase in LVAT would induce the economic growth of Nigerian Nation positively. The p=0.0107<0.05 indicated that the null hypothesis of no significant effect was rejected and concluded that LVAT had significant and positive effect on GNP in Nigeria. Also, the coefficient of LCED (-0.033313) was an indication that a 1 percent increase in customs and excise duties (CED) would on the average lead to 0.03 percent decrease in economic growth in Nigeria. The p=0.0286<0.05 indicated that Null hypothesis was rejected; therefore, LCED had significant but negative effect on GNP in Nigeria.

4.5.3Effect of Direct and Indirect taxes on Economic growth

From the short run regression result in table 5, the overall coefficient of determination (R^2) showed that about 99 per cent of changes in economic growth (LRGNP) was explained by variation of the independent variables in the equation. The F value of 883.6153(0.00000) shows that the model is statistically significant. This suggested that the independent variables in the model were able to predict the changes in the economic growth. The value of R^2 (0.9995488) was less than the value of DW (2.192984). It revealed that there was no sign of auto- correlation or serial correlation in the model specification. The coefficients of the variables which signified the effect of taxes on economic growth showed from the model that Company Income Tax (LCIT), Customs and Excise duties (LCED) and Petroleum Profit Tax (LPPT) did not obey their apriori expectations. Meanwhile, Value Added Tax (LVAT) did obey its theoretical expectation This suggests that most of the explanatory variables did not follow the theoretical relationship as regards the signs and magnitude of their coefficients. The value of error correction followed the expected signs and suggested that following the previous disequilibrium, it took an average of 37.3 percent to correct the past disequilibrium yearly to return to equilibrium. This revealed that the previous disequilibrium was corrected at 37.3 percent speed of adjustment annually.

4.5 Test of Auto Distributed Lag Model (ARDL)

Table 5: ARDL Estimates of Direct and Indirect Tax Effect on Economic Growth

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
C	-0.464676	0.703692	-0.660340	0.5162
LPPT	-0.043532	0.017132	-2.540958	0.0190
LPPT(-1)	0.047986	0.012347	3.886583	0.0009
LCIT	-0.058089	0.048255	-1.203810	0.2421
LCIT(-1)	-0.103639	0.026419	-3.922879	0.0008
LCED	-0.033313	0.014177	-2.349750	0.0286
LVAT	0.179977	0.064215	2.802730	0.0107
R-squared	0.996616			
Adjusted R-squared	0.995488			
F-statistic	883.6153			
Durbin-Watson stat	2.19208			

Source: Authors Computation using Eviews 10

4.6   Post Estimation Test: Breusch-Godfrey Heteroskedasticity Test

The existence of unequal variance among the explanatory variables was evaluated using the Breusch-Pagan-Godfrey Heteroskedasticity Test. The results showed that the F-distribution (Test Statistic = 0.374684 and P-value = 0.9601) indicate that the null hypothesis was not rejected hence, Heteroskedasticity is not a problem in the model. Meanwhile, the normality test was also conducted, the result showed that the data are normally distributed because the Jarque- probability (0.8338) was greater than 5 percent levels. Furthermore, the residual dependence test was conducted to determine if there is autocorrelation among the variables. This was to prevent the correlation among the residuals. The F statistics (1.513558) in table 4.6 with probability value of 0.2936 revealed that there was no autocorrelation in the model. The test results proved the stability, robustness and consistency of the model.

4.6 Post Estimation Test Results

TEST	F- STATISTICS	PROBABILITY
Heteroskedasticity	0.374684	0.9601
Jarque-Bera	0.363480	0.833818
Breusch-Godfrey Serial Correlation LM Test	1.513558	0.2936

Source: Authors Computation using EVIEWS 10.

4.6 Discussion of Findings

The study examined the effect of direct and indirect tax on economic growth in Nigeria. The study applied pre-estimation checks to ensure reliability of the result. The parameters estimate and the estimated regression were also done to meet the assumptions of ARDL. The explanatory variation explained about 99% of the variation in the dependent variables. The model was found to be statistically significant (P= 0.000) which shows a joint significance of the model.

The analysis of hypothesis one shows that direct tax measured by Petroleum profit tax (LPPT) and Company Income Tax (LCIT) has significant effect on economic growth in Nigeria. The findings show that increase in LCIT and LPPT decrease economic growth by 0.045 percent and 0.025 percent respectively annually. The finding lends credence to Gale & Samwick, (2014) with assertion that tax policy has the potential to raise economic growth, but there is no guarantee that all taxes will improve economic performance. Meanwhile, some taxes especially direct tax such as PPT and CIT have been found to have negative effect on economic growth. This view is supported by Rudolf, (2014) findings from the examination of the Impact of taxation on Economic Growth in OECD Countries that Companies Income Tax (CIT) and Personal Income Tax (PIT) are harmful to economic growth. The harmful nature of direct tax follows the disincentives it has on producers' inability to produce in the face of increased direct taxation. This affects employment and eventually economic performance on the long run. The finding is also consistent with Stoilova, (2017) and Ojijo & Olushola, (2018) who found that direct taxes (CIT) negatively impacted on RGNP while the proportion of tax contribution to RGNP falls short of optimal level in economic activities and output overtime.

Analysis of hypothesis two shows that economic growth is influenced and favored by indirect taxation in the form of VAT but does not favour the increase in custom & excise duties(CED)in Nigeria. The finding indicates that movement in indirect taxation (LVAT) causes movement in economic growth in a direction favourable to the economy. The finding supports Asaolu, etal. (2018) who examined tax revenue and economic growth and found that VAT and CED have significant positive relationship with GDP at 5% level. This shows that indirect taxation seems to favour increased production as producers have incentives to produce since the bulk of taxation is shifted to the consumers. The positive incentive of VAT to the economy may have influenced the recent increase in VAT from 5% to 7.5 percent (Whitehouse,2020), because such increase does not have the capacity to distort the economy but have a long run positive effect on the economy since it does not directly affect the producers' ability to continue in production. Meanwhile, Laffer curve assumption used as lense for this study is in agreement with the findings of this hypothesis, as well as the finding of Emmanuel (2013 cited in Anulika, 2019) who examined the effects of VAT on economic growth and total tax revenue in Nigeria between 1994 to 2010.The study found that VAT has significant effect on GDP and also on total tax revenue. This indicates that increase in value added tax would lead to an increase in tax revenue and economic growth. However, this finding negates the findings of Maganya (2020) who carried out a study on tax revenue and economic growth on developing countries and found that taxes on domestic goods and services (CED) have significant and positive relationship with GDP. However, the second part of the Maganya (2020) which found income taxes to be statistically significant but negatively related to GDP is consistent with this study.

5. CONCLUSION AND RECOMMENDATION

The study examined the effect of direct and indirect tax on economic growth in Nigeria between 1995 and 2019 with direct taxation and indirect taxation as the components of the model. The study found that component of direct taxation such as Petroleum Profit Tax(LPPT) and Company Income Tax(LCIT) have negative effect on economic growth due to their ability to distort the economy leading to increase in unemployment. This trickle down the economy causing reduction in production with supply side effect. Meanwhile, the components of indirect taxation such as Value Added Tax (LVAT) was found to have positive effect on the economy while LCED was

found insignificant in explaining changes in economy between 1995 and 2019.This shows that VAT; a form of indirect tax contribute significantly to government revenue and by extension, economic expansion. This explains the importance of VAT to economic development in Nigeria.

The study recommends that; less attention should be placed on the revenue generation from the petroleum profit tax(LPPT) and Company Income Tax(LCIT) since their effect on economic does not guarantee economy development in Nigeria on the long run. Meanwhile, from ARDL results, Value Added Tax (LVAT) should be encouraged such that more goods are brought into the VAT list in order to expand the tax net in Nigeria. It is equally recommended that government should look vigorously into the loopholes that increase tax avoidance and evasion, so as to close such holes and increase both the taxable income and revenue from tax, which will transient to positive impact on economic growth. The government should as well oversee companies' remittance of VAT to ensure full compliance. This will guarantee flow of government revenue overtime. Meanwhile, excise duties on local manufacturing firm sourcing for raw material abroad should not be excessive to prevent local firms' crowd out.

REFERENCE

1. Abata, M.A. (2014) The Impact of tax revenue on Nigerian Economy. Journal of Policy and Development studies, 9(1), 109-123
2. Ahmad, S., Sial, M.H. and Ahmad, N. (2016) Taxes and Economics Growth: An Empirical Analysis of Pakistan. European Journal of Business and social sciences, 5(2), 16-29
3. Akhor, S. and Ekundayo, O. (2016) The Impact of Indirect Tax Revenue on Economic Growth: The Nigerian Experience. Igbenedion University Journal of Accounting, 2(1), 62-87
4. Anulika, L.U. (2019). Impact of indirect taxation on economic growth in Nigeria), International Journal of Advanced Engineering Research and Science,6 (5), 54-69
5. Ali, A.A., Ali, Y. S. A., and Mohamed, S.D., (2018). The impact of tax revenues on economic growth: a time series evidence from Kenya. Academic Research International,9(3) 162-170
6. Arnold, J. (2008). Tax policy for economic recovery and growth. Economic Journal, l 12(1):59-80
7. Arowoshegbe, A. O., Uniamikogbo, E., and Aigienohuwa, O. O. (2017). Tax revenue and economic Growth in Nigeria. Scholars Journal of Economics, Business and Management, 4(10), 696-702
8. Asaolu, T. O., Olabisi, J., Akinbode, S. O. &Alebiosu, O.N., (2018). Tax revenue and economic growth. ScholedgeInternational Journal of Management,5(7) 72-85
9. Ayeni, A.T. (2014) Impact of non- oil Revenue on Economic growth: The Nigerian perspective. International Journal of Finance and Accounting, 3(5), 303-309
10. Ayeni, A.P., Ibrahim J. and Adeyemi, A. O., (2017) Tax Revenue and Nigerian Economic Growth. European Journal of Accounting, Auditing and Finance Research 5(11), 75-85.
11. Ayeni, O.A., & Omodero, C.O. (2022) Tax Revenue and Economic Growth in Nigeria. Cogent Business and Management, 9(1),
12. Boyle, J.M. (2020) Laffer Curve. www.Investopedia.com
13. Chappelow, J. (2020) Laffer Curve. www.Investopedia.com
14. Cole, A. (2016) Fixing the corporate income tax, tax foundation. https:// tax foundation.org/fixing-corporate-income-tax.
15. Cornelius, M.O., Ogar, A. and Oka, F.A. (2016) The Impact of Tax Revenue on Economic Growth: Evidence from Nigeria. IOSR Journal of Economic and Finance, 7(1), 32-38.
16. Entin, S. (2017) Labour Bears much of the cost of the corporate tax. Tax foundation. https://tiles.taxfoundation.org/taxfoundation-SR2381.pdf
17. Etale, L. M. &Bingilar, P. F., (2016). The impact of company income tax and value added tax on economic growth: evidence from Nigeria. European Journal of Accounting, Auditing and Finance Research4 (7):106-112
18. Federal Ministry of Finance, (2015) A Transition Budget, http://finance.gov.ng
19. Gale, W. G. &Samwick, A. A., (2014). Effects of income tax changes on economic growth. The Brookings institution.1(3):1-15
20. Hodge, S.A. (2015) Dynamic Scoring made simple, Tax foundation. https:// taxfoundation.org/dynamic-scoring-made-simple/.
21. Hodge, S.A. (2016) The corporate Income Tax is most harmful for growth and wages. Tax foundation. https://taxfoundation.org/corporate-income-tax-most-harmful-growth-and-wages/.
22. Ihenyen, C. J &Mieseigha, E. G., (2014). Taxation as an instrument of economic growth: the nigerian perspectives. Information and Knowledge Management,4(12):49-53
23. Iqbal, N., Azam, M. F.. and Shinwari, S. (2015) Empirical Analysis of tax Revenues and its impact on Economic growth of Pakistan. Journal of Economics and sustainable development, 6(1), 110-117
24. Kalas, B., Mirovic, V. and Andrasic, J. (2017) Estimating the Impact of taxes on the Economic Growth in the USA. Economic themes, 55(4), 481-499
25. Kenton, W. (2019) Trickle-down theory. https//: Investopedia.Com

26. Kesavarajah, M., (2014) Tax Composition and output Growth: Evidence from Sri Lanka. Staff studies Central bank of Sri Lanka, 44(2), 33-67

27. Khumbuzile, D &Hlalefang, K., (2018). The impact of taxation on economic growth in South Africa. Munich Personal RePEc Archive8 (6):1-19

28. Lyndon, M.E. and Paymaster, F.B. (2016) The impact of company income tax and value added tax on economic Growth: evidence from Nigeria. European Journal of Accounting, auditing and finance research, 4(7),106-112

29. Muriithi, C., (2013) The Relationship between government Revenue and Economic Growth in Kenya. International Academic Journal of information sciences and project management, 1 (1), 87-109

30. Munir, K., and Sultan, M. (2016) Are some taxes better for growth in Pakistan? A time series Analysis. MPRA. https://mpra.ub.uni-muenchen.de/088281

31. National Bureau of statistics (2018) www.nigerianstate.gov.ng

32. Nwachukwu, R.C., Nwoha, C., & Inyama, O., (2022). Effect of Taxation on Economic Growth in Nigeria. International Journal of Innovative Finance and Economic Research, 10(4),179 – 193.

33. Ofoegbu, G.N., Akwu, D.O., and Olive, O. (2016) Empirical Analysis of effect of tax Revenue on Economic Development of Nigeria. International Journal of Asian Social Science, 6(10), 604-613

34. Ogundana, O.M., Ogundana, O.M., Ibidunni, A.S., and Adetoyinbo, A. (2017). Impact of direct and indirect tax on the Nigerian Economic growth. Binus business Review 8(3),215-220.

35. Ojijo, O. and Olushola, O. (2018). Taxation and economic growth in a resource-rich country: a case of Nigeria. Intechopen. 1(4):61-81

36. Omodero, C.O. and Dandago, K.T. (2019) Tax Revenue and Public Services Delivery: Evidence from Nigeria. International Journal of Finance Research, 10(2), 82-91

37. Onakoya, A.B., Afintinni, O.I., and Ogundajo,G.O.(2017) Taxation Revenue Economic Growth in Africa. Academic Journal 9(2), 11-12

38. Ozdemir, B., (2019) VergiSistemlerindeDolaysizVergilerdenDolayliVergilereKayisYa da TuketimVergilerininArtanAgirligi. MaliyeDergisi, 157, 1-32

39. Palic, I. Zmuk, B. and Grofelnik, B. (2017) The long run impact of personal income taxation on Economic Development: Evidence from Croatian. Review of Economic, Business and Social statistics, 3(1) 35 – 44

40. Pomerleau, K. (2018) The united states' corporate income tax rate is now more in line with those levied by other major nations. Taxfoundation.https://taxfoundation.org/US-corporate-income-tax-more-competitive/.

41. Ramot and Ichihashi, (2012) the Effects of Companies Income Tax and Personal Income Tax on Economic Growth.

42. Rudolf, M. (2014). The impact of taxation on economic growth: case study of OECD countries. Review of Economic Perspectives. 14(4):309-328.

43. Suna, K., Metehan, Y. and Fadime , A., (2019) The impact of Direct and indirect taxes on the growth of the Turkish Economy. Institute of public finance 43(3),311-323

44. Stoilova, (2017) Tax structure and economic growth: Evidence from the European Union, Contaduría y Administración, 62, 1041-1057

45. Tabet, R and Onyeukwu, P.E. (2019). Multiple Taxation and SMES Financial Performance, in Abuja. World Journal of Innovative Research,6(2): 65-82.

46. Taufik, A.H., Abdul, A. K., Jasmine,D., Norzianana, L., Rainah, G., & Salwa, Z. (2022). Impact of direct and indirect taxes on economic development: A comparison between developed and developing Countries. Cogent Economics and Finance, 10(1),

47. Ukpabi, A.L. (2019) The Impact of Indirect Taxation on Economic Growth in Nigeria In Nigeria. International Journal of Advanced Engineering Research and science (IJAERS), 6(5), 54-61

48. World Bank Data (2017) http://data.world bank.Org

49. York, E. (2018) The benefits of cutting the corporate income tax rate. Tax foundation, https://taxfoundation.org/benefits-cutting-coporate-income-tax-rate/.