Taxation and Revenue Generation in Nigeria

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Abstract

This study examined the effects of taxation on revenue generation in Nigeria. It also analysed the direction of causality between taxation and revenue generation utilizing method of Johansen co-integration and the Granger causality tests using secondary data spanning the period 1970 to 2017. Results showed that PPT has positive significant effect on REV.VAT, CORPT and CUSEXC also had positive significant effect on REV. But CUSEXC has the lowest significant effect on REV both in the short run and in the long run. All the components of taxation showed bidirectional causality with government revenue in Nigeria because PPT, VAT, CORPT and CUSEXC, jointly, Granger-cause REV. It is concluded that taxation had positive significant impact on revenue generation of government both in the short run and in the long run. It is now recommended that the regulatory authorities charged with the responsibility and accountability of collecting tax should further be supported and empowered by government to impose compliance on taxpayers, and bring tax evasion and avoidance into tax net so as to generate more revenue for the government to implement its fiscal responsibilities.

1. INTRODUCTION

Nigeria did not consider taxation as a sustainable source of revenue, during the 1970s and late 80s as a lot of attention was focused on oil revenue. During this period, all the States in the country relied seriously on proceeds from the Federation Account. In 2014 at the turn of the global recession which saw a sharp fall in oil prices and by extension reduced proceeds from the Federation accounts, the overdependence on income from oil created a discrepancy in the implementation of some of the fiscal policies. Governments (Federal, State, and Local) began to look inwards focusing on Internally Generated Revenue (IGR) as a sustainable means of funding as bankruptcy loomed among the States.The revenue accruing to the federal Government of Nigeria from oil over the years has remained grossly insufficient to meet the growing social and public spending required in fostering economic growth and development in the country. Nigeria employed taxation as an alternative to source for revenue when the crude oil crashed in world market. If government intends to increase money in circulation, taxation will be reduced inorder to enhance the purchases power of both individual and private sectors. On the other hands, if government determines to cut down money in circulation, taxation policies will be cleverly and clandestinely designed and enacted to suit the purpose of taxation increment which invariably increases revenue generation of the government.

Consistent low tax revenue inflow is characterized by government neglience, tax evasion, avoidance, record falsifications, gross inefficiency and leakages.These have hampered the amount of revenue to be realized from tax sources over the years. The incidence of tax evasion and avoidance by tax payers is high, leading to low level of government revenue which further reduces the level of government expenditure, culminating into a reduction in the income savings and expenditure of households and firms, leading to low level of economic activities and economic growth (Cornelius, Ogar & Oka 2016).

Recently, government has been monitoring the collection of taxes (PPT, VAT, CIT, personal income tax, and custom and excise duties) through treasury single account and management informatics system so as to reduce tax evasion and avoidance in order to generate more revenue. This perhaps ignited cacophonous agitation and reactions that masses have been victimized by government with different taxes.It should be noted that taxation which is one of the major instruments used in regulating economy, boosting investment, regulating inflation, and generating revenue to finance government expenditure has been overlooked since the inception of oil revenue which made economy vulnerable to economic mess, humiliation, crisis and economic meltdown. Taxation being one of the fiscal instruments used by government to stabilize economy has been underutilized by the government. Arising from above, this studyexamined the impact of different component of taxes on revenue generation of government in Nigeria from 1970 to 2017.

2. LITERATURE REVIEW

Taxation in Nigeria

Taxation in Nigeria following the extant laws is enforced by the 3 tiers of government, that is, federal, state, and local governments with each having its sphere clearly spelt out in the Taxes and Levies (approved list for collection) law, 1998. However, Nigeria runs a largely centralized revenue collection system, with the federal government collecting the major revenue (petroleum revenue – profit taxes, royalties, crude oil sales; company income tax, value added tax, customs and excise duties) on behalf of the constituent governments (Emmanuel, 2010).

The tax system in Nigeria is made up of the tax policy, the tax laws and the tax administration. All of these are expected to work together in order to achieve the economic goal of the nation. According to the Presidential Committee on National tax policy (2008), the central objective of the Nigerian tax system is to contribute to the wellbeing of all Nigerians directly through improved policy formulation and indirectly through appropriate utilization of tax revenue generated for the benefit of the people. In generating revenue to achieve this goal, the tax system is expected to minimize distortion in the economy. Other expectations of the Nigerian tax system according to the Presidential Committee on National tax policy (2008) are to;encourage economic growth and development, generate stable revenue or resources needed by government to accomplish loadableprojects and or investment for the benefit of the people, provide economic stabilization, to pursue fairness and distributive equity, and correction of market failure and imperfection.

Empirical review

Onaolapo, Aworemi and Ajala (2014) examined the impact of value added tax on revenue generation in Nigeria. The Secondary Source of data was sought from Central Bank of Nigeria statistical Bulletin, Federal Inland Revenue Service Annual Reports and Chartered Institute of Taxation of Nigeria Journal. Data analysis was performed with the use of stepwise regression analysis. Findings showed that Value Added Tax has statistically significant effect on revenue generation in Nigeria. The study recommends that there should be dedication and apparent honest on the parts of all agents of VAT with respect to the collection and payment and that government should try as much as possible to improve on the way of collecting value added tax.

Samuel and Tyokoso (2014) assessed the impact of taxation on revenue generation in

Nigeria, attention is given to FCT and some selected states. The study is also aimed at highlighting the concept and nature of taxation, objectives of taxation, classification of taxes, Nigeria's major taxes and other issues that relate to taxation. In achieving the objective of the study, the researcher adopted primary and secondary sources of data to present and analyze theinformation for the study. The testing of hypotheses was done using regression analysis via SPSS version 17.0. The research discovered among others that, taxation has a significant contribution on revenue generation, taxation has a significant contribution on Gross Domestic Product (GDP) and tax evasion and tax avoidance have a significant effect on revenue generation in Nigeria. The research recommends among others that well equipped database on tax payers should be established by the Federal, State and Local Governments with the aim of identifying all possible sources of income of tax payers for tax purpose, the tax collection processes most be free from corruption and embezzlement and stringent penalties should be meted by the federal, state and local governments to people who evade and avoid tax payments in order to discourage tax evasion and tax avoidance.

Akhor, Atu and Ekundayo (2016) examined the impact of indirect tax revenue on economic growth in Nigeria. The study uses value added tax revenue and custom and excise duty revenue as independent variables and economic growth was proxy with real gross domestic product as the dependent variable. The study employ secondary data collected from Central Bank of Nigeria statistical bulletin for the period covering 1993 to 2013 for the empirical analysis using the convenient sampling techniques. The research design is time series and the data were analyzed using descriptive statistics, correlation, unit root test, cointegration test and error correction model regression. The result revealed that value added tax had a negative and

significant impact on real gross domestic product. In the same vein, past custom and excise duty had a negative and weakly significant impact on real gross domestic product. The Error Correction Model (ECM (-1)) coefficient had a correct negative and statistically significant sign. This shows that short-run deviation can be quickly corrected. The Durbin-Watson value indicates the absence of autocorrelation in the model. The study therefore recommended that tax administrative loopholes should be plugged for tax revenue to contribute immensely to the development of the economy since past value added tax and custom and excise duty had a significant impact on economic growth.

Cornelius, Ogar and Oka (2016) examined the impact of tax revenue on the Nigerian economy. The objectives of the study were; to examine the relationship between petroleum profit tax and the Nigeria economy, the impact of company income tax on the Nigerian economy and the effectiveness of nonoil revenue on the Nigerian economy. Data were sourced from Central Bank Statistical Bulletin and extracted through desk survey method. Ordinary least square of multiple regression models was used to establish the relationship between dependent and independent variables. The finding revealed that there is a significant relationship between petroleum profit tax and the growth of the Nigeria economy. It showed that there is a significant relationship between nonoil revenue and the growth of the Nigeria economy. The finding also revealed that there is no significant relationship between company income tax and the growth of the Nigeria economy. It was recommended that government should endeavour to provide social amenities to all nooks and crannies of the country. Also that government should engage in a complete re-organization of the tax administrative machineries; in order to reduced tolerable problems of tax evasion and avoidance and finally, to enhance the tax base of government, employment

opportunities should be created and a good environment for entrepreneurship and innovation to thrive made using tax proceeds.

Gwa and Kase (2018) examined the contribution of tax revenue on the economic growth of Nigeria. The first objective of this study was to examine the contribution of petroleum profit tax (PPT) on economic growth of Nigeria, the second was to examine the contribution of Value added tax (VAT) on economic growth of Nigeria and the third was to ascertain the contribution of company income tax (CIT) on economic growth of Nigeria. The study predominantly used secondary source of data. These data were time series, and data was collected from CBN statistical bulletin and Federal Inland Revenue Service. The study covers the period from 1997 to 2016. Ordinary least square of multiple regression models was used to ascertain the contribution of independent variables on dependent variable. The finding revealed that there is a significant contribution of Company Income Tax (CIT) and Value Added Tax (VAT) on the economic growth of Nigeria. The finding also revealed that there is no significant contribution of Petroleum Profit Tax (PPT) on the growth of the Nigeria economy.

3. METHODOLOGY
Secondary data were used in this study. The relevant data for the study were obtained from Central Bank of Nigeria (CBN) Statistical Bulletins and Federal Inland Revenue Services Bulletin from 1970 to 2017. Regression analysis technique was used to measure the effects of independent variables on dependent variable while Units root test, Johansen co-integration, Vector Error-Correction Model, and Granger causality tests were employed to determine the long run relationship and causality links among the variables.

Model Specification

The formulation of the model was based on theory that taxation and consumption are inversely related. That is disposable income is corroded by taxation. Revenue Generation was employed as the explained variable while the explanatory variables are petroleum profit tax (PPT), Value added tax (VAT), company income tax, and Custom and Excise duties.. This can be specifically stated as;

$$Z = f(p1, \ p2, \ p3, p4, \ \mu)$$

The independent variable $p1 - p4$

The dependent variable Z

A regression model relates Z to a function of p and μ

Error term is denoted as μ.

$$\sum_{i=1}^{n} REV = a0 + \sum_{i=1}^{n} a1PPT + \sum_{i=1}^{n} a2VAT + \sum_{i=1}^{n} a3CORPT + \sum_{i=1}^{n} a4CUSEXC + \mu3 \qquad (1)$$

Transforming equation (1) to the natural logarithm it changed to

$$\sum_{i=1}^{n} LOGREV = a0 + \sum_{i=1}^{n} a1LOGPPT + \sum_{i=1}^{n} a2LOGVAT + \sum_{i=1}^{n} a3LOGCORPT + \sum_{i=1}^{n} a4LOGCUSEXC + \mu4 \qquad (2)$$

Basic VECM is

$$\Delta y_t = \alpha \beta' y_{t-1} + \sum_{t=1}^{p-1} \Gamma_i \Delta y_{t-i} + \epsilon_t \qquad (3$$

where y is a (K x 1) vector of I(1) variables, α and β are (Kx r) parameter matrices with rank r < K, $\Gamma_1,.,..,\Gamma_{p-1}$ are (K x K) matrices of parameters, and ϵt is a (K x1) vector of normally distributed errors that is serially uncorrelated but has contemporaneous covariance matrix.

4. ESTIMATION RESULTS AND DISCUSSION OF FINDINGS

Table 1: The effect of Taxation on Revenue Generation of Government in Nigeria

Dependent variables	Independent variables	Coefficient	Standard error	T	P>/T/	(95% conf. Interval)
LOGREV	LOGPPT	.6820273	.0548909	12.43	0.000	.5650301 .7990245
	LOGVAT	.3450676	.1462448	3.36	0.004	.0333542 .6567809
	LOGCORPT	.0215151	.0446217	3.09	0.006	.1102606 .0799571
	LOGCUSEXC	.0013173	.1733022	2.99	0.018	.7225587 .0162111
	CONSTANT	5.970361	.6350646	9.40	0.000	4.616753 7.323969

R-squared = 0.6582	Adj R-squared = 0.6413	Prob> F = 0.0000	Root MSE = .1684	F(4, 15) = 250.13

Source :Regression using STATA 12

The Table 1 shows the effect of taxation on revenue generation in Nigeria. 1% increase in the Petroleum profit tax (PPT) increases revenue generation (REV) by 0.6%. This suggests a positive significant effect of PPT on REV (β=.6820273, t = **12.43**, P>|t| =0.000). 1% increase in Value added tax (VAT) increases REV by 0.3 %.This means VAT imparted REV positively and significantly (β=.3450676, t = 3.66, P>|t| =0.004). That is if VAT increases, REV also increases. More so, 1% increase in the corporate income tax (CORPT) increases REV by 0.02%. This suggests a positive significant effect of corporate income tax on REV (β=.0215151, t = 3.08, P>|t| =0.006). In the same vein, 1% increase in Custom and excise duty (CUSEXC) increases REV by 0.39%. This reveals a positive significant effect of CUSEXC on REV (β=-.0013173, t = 2.99, P>|t| =0.018). This is suggesting that if CUSEXC in Nigeria increases, REV also increases.

Given coefficient of determination (R^2) as 0.6582 (66%) with the high value of adjusted R^2 as 64%, it shows that the independent variables explained 64% of the observed variation in revenue generation in Nigeria, the remaining 36% are for error terms. The F and probability statistics also confirmed the significance of this model. This hypothesis is to test whether or not there is significant effect of taxation on Revenue generation in Nigeria. From the decision rule above, because the p-value for the alternative hypothesis equals 0.0000 which is less than 0.05, is negated the null hypothesis. Therefore, the alternative hypothesis is upheld, that is taxation has significant effect on Revenue generation in Nigeria.

Table 2: Unit Root Test

Variables	ADF stat	1% critical value	5% critical value	10% critical value	Order of integration	Remark
REV	3.443	-3.628	-2.950	-2.608	I(1)	Stationary
PPT	3.922 ***	-3.655	-2.961	-2.613	I(1)	Stationary
VAT	3.783***	3.750	3.000	-2.630	I(1)	Stationary
CORPT	3.432***	-3.655	-2.961	-2.613	I(1)	Stationary
CUSEXC	3.587	3.750	3.000	-2.630	I(1)	Stationary

(*), (**) and (***) means stationary at 1%. 5% and 10% respectively
Source: **Authors' Computation (2018) through STATA 12**

Table 2 showed the test of the unit root for the residuals generated from the estimation of the OLS. It showed that residuals were stationary at levelsI(1), rejecting null hypothesis of the existence of unit root at 5 percent significant level. By implication, there existed co-integration (long run relationship) between components of Taxationand revenue in Nigeria. This also explained further, that if components of Taxationand revenue drifted apart from equilibrium for a while in the short run, the taxation and/or revenue generation policies of the government would bring them back together in the long run.

Table 3 -Selection-order criteria

Lag	LL	LR	Df	p	FPE	AIC	HQIC	SBIC
0	-2830.75				2.6e+55	141.788	141.864	141.999
1	-2665.2	331.1	25	0.000	2.3e+52	134.76	135.218	136.027
2	-2529.88	270.64	25	0.000	1.0e+50	129.244	130.084	131.566
3	-2318.52	422.71	25	0.000	1.1e+46	119.926	121.147	123.304
4	-2096.51	444.02*	25	0.000	7.9e+41*	110.076*	111.679*	114.509*

  Endogenous: REV PPT VAT CIT CUSEXC.   Exogenous: _cons
Source: **Authors' Computation (2018) through STATA 12**

Lags four was used for this model because the Hannan–Quinn information criterion (HQIC)method, Schwarz Bayesian information criterion (SBIC) method, and sequential likelihood-ratio (LR) test accepted four lags, as showed by the "*" in the output.

Table 4- Vector Autoregression

Equation	Parms	RMSE	R sq	chi2	P>chi2
REV	11	.364348	0.9508	347.8618	0.0064
PPT	11	.50427	0.9486	332.1568	0.0000
VAT	11	.565146	0.9497	340.1545	0.0000
CORPT	11	.602785	0.9066	174.7072	0.0000
CUSEXC	11	.921085	0.8551	106.26	0.0000
Log likelihood = 55.47418	Det(Sigma_ml) = 1.45e-09	AIC = .0526867	HQIC = .3224447	SBIC	= 2.667894

Source: **Authors' Computation (2018) through STATA 12**

In order to confirm the output result of Selection-order criteria in selecting the appropriate Lag, Vector Autoregression was also tested, the results shown in Table 4.Lags four was also chosen for this model because the Hannan–Quinn information criterion (HQIC) method, Schwarz Bayesian information criterion (SBIC) method, and sequential likelihood-ratio (LR) test all confirmed four lags as indicatedAIC = .0526867; HQIC = .3224447; and SBIC = 2.667894 which greater than 0.05 significant level.

Table 5- Johansen tests for cointegration.

Rank	Eigen Value	Parm	LL	Trace statistic	5% critical value	1% critical	Eigen Value
0	-	80	-2351.3128	509.5968	68.52	76.07	-
1	0.99936	89	-2204.1769	215.3251	47.21	54.46	0.99936
2	0.96414	96	-2137.6121	82.1955	29.68	35.65	0.96414
3	0.72511	101	-2111.7842	30.5396	15.41	20.04	0.72511
4	0.53276	104	-2096.5659	0.1030*1*5	3.76	6.65	0.53276

| 5 | 0.00257 | 105 | -2096.5144 | | 0.00257 |

Source: **Authors' Computation (2018) through STATA 12**

Table 5 generated results about the sample, the trend specification, and the number of lags included in the model. The main table contains a separate row for each possible value of r, the number of cointegrating equations. The trace statistic from r = 0 to r = 3 (509.5968; 215.3251; 82.1955 and 30.5396) exceeded their critical value (68.52; 47.21; 29.68: 15.41; respectively) the null hypothesis that there is, none, one, two, and three or fewer cointegrating equation is rejected. In contrast, because the trace statistic at r = 4 of 2.1914 is less than its critical value of 3.76, the null hypothesis that there are four or fewer cointegrating equations cannot be rejected.Therefore, there four or fewer cointegrating vectors existed among the variable, that is the variables are contegirated.

Table 6: Vector error-correction model

Equation	Parms	RMSE	R sq	chi2	P>chi2
D_ REV	7	595352	0.6482	64.50058	0000
D_ PPT	7	335843	0.6439	63.27807	0.0125
D_ VAT	7	435687	0.8448	190.5178	0.0000
D_ CORPT	7	518465	0.8496	197.7838	0.0000
D_ CUSEXC	7	307439	0.8269	167.1545	0.0000
Log likelihood = -2728.842	Det(Sigma_ml) = 1.87e+50	AIC = 131.802	HQIC = 132.3934	SBIC	= 133.4156

Source: **Authors' Computation (2018) through STATA 12**

Table 7: Johansen normalization restriction imposed

Beta	Coefficient	Std Error	Z	P>|z|	[95% Conf. Interval]	
_ce1 REV	1	.	.	.	.	
PPT	3.022925	.0782059	38.65	0.000	3.176206	2.869644
VAT	.6154388	.3101566	3.72	0.000	1.762283	.5464918
CORPT	.4914556	.1294826	3.80	0.000	.2376744	.7452368
CUSEXC	.3696179	.7122061	5.61	0.000	5.392078	2.600281
-CONS	9729.001	.	.	.	.	

Source: **Authors' Computation (2018) through STATA 12**

Table 6 and Table 7 contained information about the sample, the fit of each equation, and overall model fit statistics. The first estimation Table contains the estimates of the short-run parameters, along with their standard errors, z statistics, and confidence intervals. The four coefficients on L. ce1 are the parameters in the adjustment matrix _ for this model. The second estimation Table contained the estimated parameters of the cointegrating vector for this model, along with their standard errors, z statistics, and confidence intervals.

According to Johansen normalization restriction imposed table, one percent

increase in PPT increases REV by 3.0 % in the long run, this shows that there is positive significant effect of PPT on REV in the long run. Also, one percent increase in VAT, increases REV by 0.61% in the long run, this shows that there is a positive significant relationship between VAT and REV in the long run. Also, one percent increase in CORPT, increases REV by 0.49% in the long run, this also shows that there is a

positive significant effect of CORPT on REV in the long run. CUSEXC, one percent increase in CUSEXC, reduces REV by 0.36% in the long run, this shows that there is a positive significant relationship between CUSEXC and REV in the long run. Coefficient is statistically significant confirmed by P>|z| which is 0.000. Overall, the output indicates that the model fits well.

Table 8: Granger causality Wald tests on Taxation and Revenue Generation in Nigeria

Equation	Excluded	chi2	Df	Prob> chi2	Decision
REV	PPT	126.51	2	0.000	PPT granger- cause REV
REV	VAT	130.52	2	0.000	VAT granger - cause REV
REV	CORPT	122.05	2	0.000	CORPT granger- cause REV
REV	CUSEXC	60.3	2	0.010	CUSEXC granger – cause REV
REV	ALL	310.45	8	0.000	ALL jointly granger cause INFL
PPT	REV	113.48	2	0.0000	REV granger- cause PPT
PPT	VAT	168.65	2	0.000	VAT granger - cause PPT
PPT	CORPT	1.4525	2	0.484	CORPT does not granger- cause PPT
PPT	CUSEXC	53.657	2	0.000	CUSEXC granger – cause PPT
PPT	ALL	328.15	8	0.000	ALL jointly granger cause PPT
VAT	REV	77.909	2	0.000	REV granger- cause VAT
VAT	PPT	127.45	2	0.000	PPT granger - cause VAT
VAT	CORPT	2.5436	2	0.280	CORPT granger- cause VAT
VAT	CUSEXC	52.321	2	0.000	CUSEXC granger – cause VAT
VAT	ALL	368.52	8	0.000	ALL jointly granger cause VAT
CORPT	REV	62.48	2	0.000	REV granger- cause CORPT
CORPT	PPT	110.04	2	0.000	PPT granger - cause CORPT
CORPT	VAT	113.03	2	0.000	VAT granger – cause CORPT
CORPT	CUSEXC	61.41	2	0.000	CUSEXC granger- cause CORPT
CORPT	ALL	518.93	8	0.000	ALL jointly granger cause CORPT
CUSEXC	REV	67.725	2	0.053	REV granger- cause CUSEXC
CUSEXC	PPT	111.69	2	0.000	PPT granger - cause CUSEXC
CUSEXC	VAT	105.25	2	0.000	VAT granger – cause CUSEXC
CUSEXC	CORPT	3.043	2	0.218	CORPT does not granger- cause CUSEXC
CUSEXC	ALL	441.31	8	0.000	ALL jointly granger cause CUSEXC

Source: **Authors' Computation (2018) through STATA 12**

Consider the results of the five tests for the first equation in the Table 8, the first is a Wald test that the coefficients on the four lags of PPT that appear in the equation for REV are jointly zero. The null hypothesis

that PPT does not Granger-cause REVcannot be accepted because Prob> chi2 is 0.000, therefore PPT granger-cause REV. Also, the null hypothesis that the coefficients on the four lags of VAT in the

equation for REV are jointly zero cannot be accepted because Prob> chi2 is **0.**000**.** So the hypothesis that VAT does not Granger causeREV cannot be accepted, therefore VAT granger-cause REV. The null hypothesis that CORPT does not Granger-cause REV cannot be accepted because Prob> chi2 is 0.000, therefore CORPT granger-cause REV. More so, the null hypothesis that the coefficients on the four lags of CUSEXC in the equation for REV are jointly zero cannot be accepted because Prob> chi2 is 0.010, therefore CUSEXC

granger-cause REV. The fifth null hypothesis is that the coefficients on the four lags of all the other endogenous variables are jointly zero. This null hypothesis cannot be accepted because Prob> chi2 is 0.000 that is PPT, VAT, CORPT and CUSEXC, jointly, Granger-cause REV. Therefore the null hypothesis that there is no causality between taxation and revenue generation in Nigeria is rejected. Alternative hypothesis is accepted that is there is causality between taxation and revenue generation in Nigeria.

Table 9: Direction of Causality between Taxation and Revenue Generation in Nigeria

Equation	Excluded	chi2	Df	Prob> chi2	Decision	Direction of Causality
REV	PPT	126.51	4	0.000	PPT granger- cause REV	PPT ➝ REV
PPT	REV	113.48	4	0.000	REV granger- cause PPT	REV ➝ PPT
REV	VAT	130.52	4	0.000	VAT granger - cause REV	VAT ➝ REV
VAT	REV	77.909	4	0.000	REV granger- cause VAT	REV ➝ VAT
REV	CORPT	122.05	4	0.000	CORPT granger- cause REV	CORPT ➝ REV
CORPT	REV	62.48	4	0.000	REV granger- cause CORPT	REV ➝ CORPT
REV	CUSEXC	60.3	4	0.000	CUSEXC granger – cause REV	CUSEXC ➝ REV
CUSEXC	REV	67.725	4	0.000	REV granger- cause CUSEXC	REV ➝ CUSEXC

Source :Author's computation (2018)

Table 9 showed the results of the causality analysis among petroleum profit tax (PPT), value added tax (VAT) corporate income tax (CORPT), custom and excise duties (CUSEXC) and revenue generation (REV). The results showed that causality ran from petroleum profit tax (PPT) to revenue generation (REV) and vice versa. This result indicated that bidirectional causality existed between the two variables (PPT and REV) in Nigeria. Furthermore, the findings revealed that the causality ran from value added tax (VAT) to revenue generation (REV), while REV also granger cause VAT. This result also indicated that bidirectional causality existed between VAT and REV. Also, corporate income tax (CORPT) with

the Chi-square statistic (122.05) and the probability value (0.000), being statistically significant, granger caused revenue generation (REV). REV also granger caused CORPT. This indicated that bidirectional causality existed between CORPT and REV. More so, it was revealed that custom and excise duties (CUSEXC) with the Chi-square statistic 51.659 and the probability value 0.000, being statistically significant, granger caused REV. REV also granger caused CUSEXC. These results showed that there was a feedback effect from taxation to revenue generationand from revenue generation to taxation. Therefore, all the component of taxation

showed bidirectional causality with government revenue in Nigeria.

5. SUMMARY AND CONCLUSION

This study examined the effects of taxation on revenue generation in Nigeria. It also looked at the direction of causality between taxation and revenue generation employing the method of Johansen co-integration and the Granger causality tests using data spanning the period 1970-2017. Results showed that PPT has positive significant effect on REV in Nigeria. VAT, CORPT and CUSEXC also had positive significant effect on REV. But CUSEXC has the lowest significant effect on REV both in the short run and in the long run. All the components of taxation showed bidirectional causality with government revenue in Nigeria because PPT, VAT, CORPT and CUSEXC, jointly, Granger-cause REV. Conclusively, taxation had positive significant on revenue generation of government both in the short run and in the long run. Taxation also granger caused revenue in Nigeria. It now recommended that the regulatory authorities charged with the responsibility and accountability of collecting tax should further be support and empowered by government to impose compliance on taxpayers, and bring tax evasion and avoidance into tax net so as to generate more revenue for the government to implement its fiscal responsibilities.

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