

An Assessment of Productivity of the Nigerian Tax System: New Evidence from Quantitative Approach

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ABSTRACT

Objective: The study assessed the productivity of Nigerian tax system from 1981-2020.

Research Design & Methods: This study used causal-comparative research design and Autoregressive Distributed Lag (ARDL) to estimate the effect of tax system on Nigerian economy.

Findings: This research work discovered that custom /excise duty and petroleum tax are the only buoyant taxes and have higher value when compared with the elasticity coefficients, which implies that a discretionary policy is effective in increasing government income from both the custom/excise and petroleum tax in Nigeria while a discretionary change has not been effective to generate more revenue from personal income tax, company income tax and value added tax. In general, personal income tax, company income tax and value added tax demonstrate mixed results in Nigeria both in the short run and the long run. Also, taxes in Nigeria do not respond to income changes as most elasticity values are clearly below one

Implications & Recommendations: The implication of this study is that the discretionary policy is effective in increasing revenue derivable from petroleum tax, custom and excise duty in Nigeria but do not in any way effective for increasing revenue that is derivable from personal income tax, company income tax and value added tax in Nigeria. Taxes in Nigeria do not respond to income changes as most elasticity values are clearly below one. The study therefore recommends that:

- An appealing tax policy and efforts should be designed on custom/excise duty and petroleum tax to drive Nigeria economy
- Effort should be made to improve tax administration and data management

Contribution & Value Added: As an improvement over the previous studies, this paper used a significant structural change (SAP 1986) that was based on macroeconomic management framework to differentiate tax elasticity from buoyancy.

Keywords: Productivity, Tax System, Buoyancy, Elasticity, ARDL, Nigeria Economy

I. INTRODUCTION

The federal government is responsible for the conduct of the state affairs and this includes provision of schools, hospital, and security among other functions. While these societal needs are numerous and essential in nature, ability to generate enough financial resources has become a challenge for government at various level. The uncertainty surrounding the Nigerian oil sector and failure of other sector to contribute meaningfully to the national development have necessitated the needs to consider other viable options like tax. According to Organisation for Economic Corporation and development (1996), taxes are confined to compulsory unrequited payments to general government while Kargbo B.I and Egwaikhide F.O. (2012) state that the major responsibility of the tax system is to garner sufficient income to meet the ever increasing public sector needs of the country. However, the statistics of tax revenue to GDP in Nigeria is worrisome. For instance, the tax-to-GDP ratio in Nigeria fell from 6.3% in 2018 to 6.0% in 2019 which is 0.3% decrease.

To appreciate the extent of tax revenue challenge in Nigeria, it is better to view non-productiveness of Nigeria tax within the framework of the OECD reports of 2021 on tax performance in Africa.

From the report, the mean value of tax to GDP for a selected 30 African nations rose by 0.3% during the same period, and stood at 16.6% in 2019. From 2010, the mean value of tax to GDP for the 30 African nations has risen by 1.8%, from 14.8% in 2010 to 16.6% in 2019. Between 2010 and 2019, the tax-to-GDP ratio in Nigeria fell by 1.3%, from 7.3% to 6.0%. The largest tax-to-GDP ratio in Nigeria was 9.6% in 2011, with the lowest being 5.3% in 2016. In 2019, among the 30 countries being compared, countries like Tunisia, Seychelles, Morocco, South-Africa recorded 34.%,

34.3%, 28.4% and 26.2% tax to GDP respectively while Nigeria was at bottom with tax to GDP ratio of 6.0% (the lowest among the 30 African nations compared).

The reasons why Nigeria tax revenue exhibits poor elasticity and sometimes little buoyancy were because of the weak economic structure where many activities of the nationals and non-nationals remain out of the tax net because of poor income levels and the uncoordinated nature of most economic activities (Bilquess, 2004). Tax collection in Nigeria is poor and Nigeria tax to GDP has been confirmed to be the lowest (at 8%) globally by the Nigerian Vice President. For instance the largest tax-to-GDP ratio in Nigeria was 9.6% in 2011, while the lowest being 5.3% in 2016. Thus, this is contributing to ever rising fiscal deficit in Nigeria which currently stood at ₦6.26 trillion as at 2022 (CBN, 2022 ; CBN, 2022).

In order to surmount the revenue challenges, various reforms were introduced in the tax system, ranging from frequent revisions in the tax rates, harmonization of tariffs, introduction of new taxes , introduction of Vehicle Identification number by the Nigeria Custom but in spite of these continuous tax reforms, Nigeria is still battling with huge budget deficits. The question of whether these reforms enhance the revenue mobilization drive/capacity and influence each category of taxes has received little empirically focus in Nigeria.

This work therefore attempted to fill the gap by examine the productivity of the entire tax system and each category of tax in Nigeria from 1981-2020 using econometric approach.

Rather than introducing many dummy variables to account for frequent tax policy adjustments (some of which are due to pressure group agitations), this study used a significant structural change (SAP 1986) that was based on macroeconomic management framework to differentiate tax elasticity from buoyancy. Finally, unlike the previous studies in Nigeria, the researchers do a comparative analysis of tax elasticity with tax buoyancy. The benefit of the approach is its ability to identify factors responsible for rapid or lagged revenue growth (Ibid, P. 66)

II. LITERATURE REVIEW

The buoyancy of tax basically refers to the quick reaction of tax revenue to a movement in income without accounting for the voluntary changes in tax policy. The tax policy changes that are made voluntarily are the ones that increase tax revenue from taxable sources. The tax rules or the tax rate are what changes the amount of tax (Osoro, 1993).

According to Jayasundera (1991), the resilience of a tax system is a reflection of the absolute sensitivity of tax income to changes in economic development as well as the effects of voluntary modifications to tax plans over time Matundu (1995), says that a buoyancy number greater than one indicates that a higher percentage rise in tax income would result from a change in GDP.

Tax elasticity is the ratio of the percentage change in tax revenue to the percentage change in income or GDP, If voluntary changes were not made to the tax rate or tax base (Jayasundera, 1991). Tax elasticity is expressed as:

$$EL_{TY} = \frac{\% \Delta TAX}{\% \Delta INCOME}$$

Where:

EL_{TY} = Refers to elasticity of tax revenue to income or GDP,

ΔTAX = Refers to change in tax revenue,

$\Delta INCOME$ = Refers to change in GDP.

Milambo (2001) claimed that elasticity is a measurement of how tax income responds to changes in the gross domestic product when the tax structure remains constant. In order to account for the effects of voluntary changes to tax plans and concepts, it is necessary to standardize the revenue stream or trends in order to estimate the elasticity of a tax system accurately.

Mansfield (1972) explains that tax elasticity refers to a growth in tax income that occurs naturally and is unaffected by discretionary decisions. High tax elasticity is achieved when there is unitary change or more than unitary change in the tax system relative to the national income. This is worthwhile for any system because it allows the government to finance the increase in expenditures by mobilizing tax revenue rather than by raising tax rates.

According to Tsegaye (1993), a high elasticity is defined as a stable evolution of the tax code or a uniform or generally positive rise in tax receipts relative to national income. A high elasticity indicates a higher than one level of responsiveness of the tax structure to changes in income. This has the conclusion that if the government wants to maximize tax collection, it would be smarter for it to adopt and rely on a high elastic tax that is independent of frequent discretionary changes. In conclusion, a unitary tax system or a high elastic tax system maximizes revenue and improves the ability of the government to produce more revenue.

Tax Buoyancy versus Tax Elasticity

Osoro (1993) defined tax buoyancy as the absolute percentage change in tax revenues after taking into account the discretionary movement of the tax. Tax buoyancy is expressed as $\frac{\Delta TR}{\Delta Y} \times \frac{Y}{TR}$.

Where: ΔTR = change in tax revenue

ΔY = change in income

Y = Income

TR = Tax revenue

While the tax elasticity is expressed as percentage change in tax all over percentage change in national income

Notably, what differentiate tax-to-income elasticity from tax buoyancy is the discretionary changes, a tax-by-tax comparative analysis of the two variables (elasticity and buoyancy) do reveals the taxes that take discretionary changes into consideration.

Tax Structure and Economic Development

A country's macroeconomic performance or economic outlook is greatly influenced by the tax theory it adopts, and the reasons are not implausible. There is evidence from both theoretical and empirical investigations that relationships exist between the tax system and national growth and development (Hinricks, 1966). A tax system's policy emphasis depends on its stage of development. Similar to how tax structure is determined by economic concepts, the significance of different revenue sources changes over time and depends on different factors (Musgrave, 1969). For example, the strategic goal of the Nigerian tax system both before and after the country's independence was to raise money for the government. Over time, however, emphasis moved to include the protection of emerging businesses as well as income redistribution to combat income inequality.

Theoretical Review

There are many theories that explain the relationship among tax revenue, tax rate, the role of a state and economic performance. There are views that government need tax revenue or funds to meet its basic responsibilities to the masses (Musgrave, 1969). There is also a view that tax rate is a critical factor in tax administration, this view posits that tax rate above a certain level decreases tax income because such rate discourage tax payers from paying tax. Although, experts opine that cutting taxes would boost productivity and encourage firm to expand and in turn trigger economic growth and high tax income during expansion yet the same result cannot be expected during recession (Laffer et al, 2012). The important element of this view is

that higher taxes discourage people from working and dissuade firms from generating revenue (Laffer, B.A. 2004). The opposing views are of the opinion that Laffer curve theory on workers' reactions to higher tax is not correct because of the substitution effect and income effect respectively (Fullerton, 2008). The neutral view express that Laffer theory may far from reality and this supported by Saez, E. et al (2012).

The bottom line of this hypothesis is that every nation needs to pay attention to its tax policies given the fact that firms do move to countries that offer a favourable tax policies.

The laffer curve theory is suitable for this study because an appealing and a suitable tax policies is necessary for tax buoyancy and elasticity.

Empirical studies

Wawire (2000) estimated Kenya's tax system's buoyancy and income-elasticity using aggregate variables. The analysis came to the conclusion that the tax system had failed to generate the required revenues based on empirical evidence. Hira (2000) identified in Kenya's tax system three forms of corruption which are intimidation and coercion at the inspection level, evasion at the point of entry through bribery, and the use of legal discretion to escape tax. More tax reforms should be implemented, according to the two studies.

Lagravinese, Liberati, and Sacchi (2020) empirically established that the income tax buoyancy on a short-run varies between nations in a panel research for 35 OECD countries covering the period 1995–2016. In Turkey, it is the lowest, whereas in the US, it is the highest.

Tanchev and Todorov (2019) investigate the relationship between tax buoyancy and economic growth in the instance of Bulgaria from 1999 to 2017. According to the findings, aggregate tax revenue, individual income tax, and social security contributions have quite different long-term buoyancies. In the long run, the value-added tax and the corporate tax are more buoyant than one another. The short-term buoyancy of the corporate tax, income tax, social security contributions, and overall tax revenues differs from one another. The short-run buoyancy of VAT exceeds one, hence the dynamics of VAT revenues are sustainable. Both over the long and short terms, it has become harder to collect the total tax revenue, personal income tax, and social security contributions. Therefore, it is advised that ineffective taxes be changed so that they are more collectible.

Dudine and Jalles (2018) examined 107 nations' long-run and short-run tax buoyancy for the period 1980–2014. Fully modified ordinary least square has been utilized for empirical analysis. The findings indicate that while both long-run and short-run buoyancies for developed countries are equal to 1, tax buoyancy for corporate income tax is greater in the long run. However, in the case of rising nations, social security and personal income tax make up a sizable portion of total earnings. Taxes on products and services are a significant source of revenue for developing nations. In the entire sample example, buoyancy is increased by both trade openness and human capital, while it is decreased by inflation and production volatility.

Wawire (2016) conducted research on Kenya's income tax productivity. According to the study, the income tax system is growth inelastic despite KRA's efforts to promote tax compliance by mandating government employees get Personal Identification Numbers and file tax returns. The study made use of time-series data from government-produced documents, which could not have been consistent across the whole period, leading to bias in the coefficients.

Barrack and Olukuru (2016) assessed in a comparative analysis the buoyancy of income tax, value-added tax, import tax, excise tax, and total tax revenue using annual data from 1972 to 2014 for Kenya and South Africa. For the estimation of buoyancy over the short and long periods as well as the degree of convergence between the two, they used the error correction model. The findings imply that both countries' tax systems are dynamic in the long and short terms, with an average rate of adjustment between long-term and short-term projections.

Akram and Sahin (2015) examine the health of Turkey's tax system from January 2005 to June 2014. The findings indicate that, in the short run, the tax system is less buoyant during the study period, but that, in the long run, buoyancy estimates reveal a positive relationship between the tax system and Turkey's income level, demonstrating that growth in GDP directly leads to an increase in tax revenue.

Belinga et al. (2014) assess the long-run and short-run tax buoyancy for 34 OECD countries between 1965 and 2012. According to the findings, the average long-run buoyancy in four countries is 1.06, which is considerably less than unity. Therefore, it may be said that the long-run buoyancy for each country is either closer to one or exceeds unity by a lesser amount. According to the

study, short-term buoyancy fluctuates more than long-term buoyancy.

Chigbu (2014) investigated the effect of value added tax on the economic growth of Nigeria using pertinent secondary data gathered from the Central Bank of Nigeria (CBN) and the Federal Inland Revenue Service (FIRS) between 1994 and 2012. He used the pertinent Breusch-Godfrey Serial Correlation LM, White Heteroskedasticity, Ramsey RESET, Jarque-Bera, Johansen Cointegration, and Granger Causality econometric tests to examine the data. His findings shown that economic growth and VAT have a long-term equilibrium relationship. It was also found that Nigeria's VAT has a general impact on the country's GDP. Based on the empirical analysis, the article comes to the conclusion that VAT is one of the most significant indirect tax components in Nigeria that influences the nation's economic growth and should be appropriately managed to lower the amount of evasion by the input and output relationship in Nigeria. In order to lower the amount of tax evasion, the study advocated, among other things, that vat-able persons should be appropriately supervised by the appropriate tax body. Finally, the level of corruption in Nigeria and among government employees must be drastically lowered in order to win the trust of tax payers and encourage voluntary tax compliance. The government should also demonstrate greater accountability in the administration of tax money.

Keho (2013) assessed the buoyancy of individual taxes in each of the UEMOA member nations from 1996 to 2008 in order to examine the buoyancy of the UEMOA countries. The findings indicate that Côte d'Ivoire's total tax system is not flexible. Additionally, the ineffectiveness of indirect taxes has a negative impact on the effectiveness of the entire tax system. Contrarily, the low tax elasticity's at the base are responsible for the minimal changes in trade and indirect taxes. This suggests that import taxes are not being collected appropriately despite an increase in imports and GDP.

Kargbo and Egwaikhide (2012) investigated the volatility of the tax system in Sierra Leone using annual data spanning the years 1977 to 2009. After adjusting the impact of alternative tax policies using Singer's (1968) dummy variables method, they contrast the measures of buoyancy and elasticity. According to their empirical findings, buoyancy estimates were greater than elasticity estimates, and short-term elasticities were lower than long-term elasticities. The estimate's findings also demonstrated that the tax system was inelastic from 1977 to 2009 and

that discretionary tax policies were successful in generating additional tax revenue.

Wawire (2011) examined the factors that affected value added tax revenue in Kenya from 1963/1964 to 2008/2009. An OLS regression was carried out with the addition of dummies to account for peculiar behaviors. As a result of the study's finding that VAT revenues react to changes in their respective tax bases slowly, it can be argued that the level of the tax bases in the past such as GDP, trade volume, and import volume had a substantial impact on the level of VAT revenues now.

III. MATERIAL AND METHODS

This research work uses tax revenue to capture tax performance while GDP is used to capture economic performance, Custom and Excise Duty, Petroleum Profit Tax, Company Income Tax, Personal Income Tax, Value Added Tax are used to capture tax buoyancy. The choice of these variables was motivated by the foundational works of Prest's (1962), Mansfield's (1972), Singer's (1968), Osoro (1991), Omorugi (1983) and Ariyo (1990). Singer (1968) approach is adopted because it includes dummy variables (simple or mixed) proxies for key discretionary changes in the tax system for each year that such policy changes was introduced.

Based on the Singer's theoretical and conceptual views, the adapted empirical model for this study is specified as:

$$\log T_t = a_0 + b_1 \log Y_t + b_2 \text{Dummy} \dots \dots \dots (i)$$

However, the dependent variable $\log T_t$ in the Singer's (1968) regression in equation (i) is adopted in equation (ii). The independent variable $\log Y_t$ in the equation (i) is also adopted and expanded to include all forms of taxes in Nigeria and this would not only make the analysis to be

comprehensive but it would demonstrate how each component of tax react to total revenue.

Thus, the expanded or modified model for this study is specified as:

$$\log TREV_t = a_0 + c_1 \log GDP_t + c_2 \log PPTAX_t + c_3 \log PITAX_t + c_4 \log VATAX_t + c_5 \log CEDUTY_t + c_6 \log CITAX_t + c_7 \log GDP_{t-1} + c_8 Dm + e_t \dots \dots \dots (iii)$$

In order to address tax buoyancy, the researcher decomposed and examined the following simple equations for tax buoyancy.

$$\log TREV = a_0 + a_1 \log GDP$$

$$\log TTREV = b_0 + b_1 \log GDP$$

$$\log CITAX = c_0 + c_1 \log GDP$$

$$\log PPTAX = d_0 + d_1 \log GDP$$

$$\log CEDUTY = e_0 + e_1 \log GDP$$

$$\log PITAX = f_0 + f_1 \log GDP$$

$$\log VATAX = g_0 + g_1 \log GDP$$

Where

TREV = Total revenue; TTREV = Total Tax Revenue; CITAX = company income tax; PPTAX = Petroleum profit tax; CEDUTY = Custom and Excise duty; PITAX = Personal Income tax; VATAX = Value Added or Sale Tax.

Based on empirical studies, structural change like SAP, intercept/ constant alone do not only changes but their correlation coefficient also changes (Koutsoyianuis 1976). Therefore, the researcher is not in doubt that Nigeria is not immune from shock that arise from the structural change and a dummy variable is used to represents Structural Adjustment Programme to account for discretionary variation.

Research Design

The research design for this study is a causal-comparative research design which is used for a research that was undertaken after the fact data are already in documented.

Sources and Measurement of Variables

Variables	Meaning of the abbreviations	Source
TREV	Total Revenue	CBN statistical bulletin (1981 - 2020)
CITAX	Company Income Tax	CBN statistical bulletin (1981 - 2020)
PPTAX	Petroleum Profit Tax	CBN statistical bulletin (1981 - 2020)
CEDUTY	Custom Exercise Duty	CBN statistical bulletin (1981 - 2020)
STRUCTURAL CHANGE	Dummy	CBN statistical bulletin (1981 - 2020)
TTR	Total tax revenue	CBN statistical bulletin (1981 - 2020)

VATAX/Sale Tax	Value added tax	CBN statistical bulletin (1981 - 2020)
PITAX	Personal income tax	CBN statistical bulletin (1981 - 2020)

Source: CBN Statistical Bulletin

Method of data analysis

The study used ARDL model for the analysis. The flexibility and suitability of Asymmetric ARDL for 1(0) and 1(1) order of integration, and its capability to test for hidden long run relationship and perform better when the sample is small is appealing to the researcher (Afolabi, M.O 2022; Granger & Yoon, 2002).

IV. DIAGNOSTIC TEST AND DISCUSSION OF RESULTS

Table 1 shows that the probability values for the unit root test accept alternative hypothesis for the entire variables because they become stationary at first difference. Hence, the study concludes that the variables' order of integration is I(1) and this suit the assumptions of ARDL. The essence of conducting the unit root test is to confirm that the model does not contain i(2) variables.

Table 4.1 : ADF Unit Root Test

Variables	Level	P-value	First Difference	P- Value	order of integration
Lcitax	-0.8662	0.9496	-5.630317	0.0002	I(1)
Lceduty	-0.3717	0.9852	-5.885674	0.0001	I(1)
Lpitax	-2.8639	0.1853	-5.719322	0.0002	I(1)
Ltrev	-2.1014	0.5285	-6.174822	0.0001	I(1)
Lpptax	-1.997	0.5842	-6.211321	0.0000	I(1)
Lvatax	-1.9361	0.6157	-3.789793	0.0284	I(1)

mackinnon critical values for rejection of null hypothesis of a unit root:
1% critical value

5% critical value

10% critical value

Long Run and Short Run Estimate of Elasticity and Buoyancy

Table 4.2 and 4.3 present the long run and short run estimate of tax elasticity and buoyancy in Nigeria.

In line with the extant literature, under an unusual situation like SAP, intercept/ constant do not only vary but their slope coefficient also varies

(Koutsoyianuis 1976). As a precaution, rather than introducing many dummy variables to account for frequent tax policy adjustments (some of which are due to pressure group agitations), this study used a significant structural change (SAP 1986) that was based on macroeconomic management framework to differentiate tax elasticity from buoyancy.

Table: 4.2

Long Run Estimate of Elasticity					Long Run Estimate of Buoyancy				
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Variable	Coefficient	Std. Error	t-Statistic	Prob.
LCED	0.168581	0.71429	0.236011	0.8168	LCED	1.649712	0.455979	3.617956	0.0023
LCIT	-0.695545	0.229276	-3.03365	0.0089	LCIT	-0.50722	0.329836	-1.537796	0.1436

LPPT	0.048071	0.247434	0.194279	0.8487	LPPT	0.565192	0.196986	2.869197	0.0111
LPIT	0.768192	0.455576	1.686198	0.1139	LPIT	-0.35977	0.4881	-0.737082	0.4717
LVAT	-1.230216	0.295189	4.167554	0.0009	LVAT	0.802506	0.435843	-1.841273	0.0842
DM	3.190702	1.469161	2.171786	0.0475	C	6.591536	5.181665	1.272088	0.2215
C	19.085485	6.06807	3.145231	0.0072					

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Table: 4.3

Short Run of Elasticity					Short Run of Buoyancy				
Variable	Coefficient	Std. Error	t-Statistic	Prob.	Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LCED)	-0.328095	0.542214	-0.605103	0.5548	D(LCED)	0.20203	0.335986	0.601305	0.5561
D(LCED(-1))	1.824861	0.487393	3.744125	0.0022	D(LCED(-1))	1.026652	0.405365	2.53266	0.0222
D(LCED(-2))	1.638233	0.398212	4.113971	0.0011	D(LCED(-2))	0.937579	0.321333	2.917776	0.0101
D(LCIT)	0.495089	0.15561	3.181612	0.0067	D(LCIT)	0.315089	0.208624	1.510318	0.1505
D(LPPT)	0.296876	0.094647	3.136657	0.0073	D(LPPT)	0.172726	0.079048	2.185077	0.0441
D(LPPT(-1))	0.056974	0.071732	0.794264	0.4403	D(LPPT(-1))	0.026886	0.082794	0.324737	0.7496
D(LPPT(-2))	0.571736	0.115219	4.962183	0.0002	D(LPPT(-2))	0.58672	0.108457	5.409717	0.0001
D(LPIT)	0.174066	0.19101	0.91129	0.3776	D(LPIT)	0.027	0.13628	0.198125	0.8454
D(LPIT(-1))	0.343604	0.154714	2.220899	0.0434	D(LPIT(-1))	0.04504	0.157249	0.286424	0.7782
D(LPIT(-2))	0.437997	0.145828	3.003516	0.0095	D(LPIT(-2))	0.462534	0.117337	3.941927	0.0012
D(LVAT)	0.875669	0.251444	3.482556	0.0037	D(LVAT)	1.198398	0.566014	2.117258	0.0503
D(DM)	1.254138	0.60225	2.082422	0.0561	CointEq(-1)	0.621208	0.127628	4.867344	0.0002
CointEq(-1)	-0.51188	0.12246	-4.18014	0.0000					

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Tax Elasticity versus Tax Buoyancy

The study compares tax elasticity estimates and tax buoyancy estimates to know the effect of discretionary change on revenue generation of the Nigerian government. It further compares the coefficient of each and every tax to ascertain which of the tax or taxes respond to a discretionary change. As a basis for comparison, high buoyancy estimates against low elasticity estimates implies that a discretionary change is effective tools of raising revenue for the government and vice-versa. From the long run estimates, custom /excise duty and petroleum tax are highly buoyant and far higher than the elasticity estimates, meaning that a discretionary policy is effective in raising revenue derivable from both the custom/excise and petroleum tax in Nigeria while a discretionary change has not been effective to raise revenue from personal tax, company income tax and value added tax. From the result, a discretionary policy significantly explains the variation in revenue generation in Nigeria. A discretionary change generates about 3.19% increase in revenue as a result of 1% change in revenue generation (GDP). In the short run, only custom and excise duty is highly buoyant and respond positively to discretionary change. The discretionary change is effective in increasing revenue derivable from custom and excise duty in Nigeria. The effect of discretionary tool is mixed for both personal income tax and petroleum tax. The effect of discretionary change on company income tax and value added tax is negative. In general, personal income tax, company income tax and value added tax are not buoyant in Nigeria both in the short run and the long run. From the above result it is also crystal clear that taxes in Nigeria do not respond to income changes as most elasticity values are clearly below one

V. CONCLUSION

From the findings, custom /excise duty and petroleum tax are buoyant and higher when compared with the elasticity coefficients, which implies that a discretionary policy is effective in increasing government income from both the custom/excise and petroleum tax in Nigeria while a discretionary change has not been effective to generate more revenue from personal tax.

It was also discovered that taxes in Nigeria do not respond to income changes as most elasticity values are clearly below one and this finding is consistent with the study by Kargbo B.I and

Egwaikhide F.O. (2012). It is understood that high buoyancy estimates as against low elasticity coefficients is a pointer to the fact that discretionary tool is efficient and effective in increasing government revenue generation.

The non-buoyancy of company income tax is not surprising because many industries in Nigeria have collapsed while the existing ones are not read to pay tax.

Likewise, personal income tax is also not productive not only because of mismanagement of tax collected, poor data administration but also because of high number of unskilled labour that operate in the informal sector of the economy (Abubakar, et al 2018).

The poor response of VAT to discretionary policy both in the short run and long run is not surprising because of lack of transparency, non-compliance with the law and tax evasion by the tax payers among other factors.

Since discretionary policy is effective for raising revenue through custom/excise duty and petroleum tax in Nigeria, policy effort should focus on custom/excise duty and petroleum tax to drive Nigeria economy.

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