FEDERALLY COLLECTED REVENUE AND ECONOMIC GROWTH IN AN EMERGING ECONOMY – 1981-2019

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ABSTRACT

The study aimed at establishing the relationship and the impacts of the Federally collected tax revenue on the growth of the economy in Nigeria. The federally collected tax revenue considered include the Petroleum Profit Tax (PPT), Companies Income Tax (CIT), Value Added Tax (VAT) and the Customs and Excise duties (CED). The economic growth was represented by the Real GDP (RGDP). The time series data adopted was spooled from the CBN statistical bulletin, the FIRS annual report and the OECD statistics covering the years 1981-2019 (39 years). The data were analysed using the multiple regression of SPSS 26.0. The findings revealed that all the federally collected tax revenue considered for the study had a positive, strong and statistically impactful on the RGDP while the outcome from the regression analysis indicated that the PPT and VAT positively and significantly impacted on the RGDP but the CIT and CED has positive but insignificant impact on the RGDP which resulted from possibility of revenue leakages through evasion and incomplete tax returns filed with the FIRS through the e-tax system. The suggestion is that the Federal government should improve on the technological infrastructure that can enhance an effective tax administration electronically.

INTRODUCTION

Over reliance on the revenue from oil sources has been a major challenge facing revenue generation in Nigeria and there exist a need to seek how to diversify and empower other sources of revenue (Dada & Audu, 2021). Nigeria being monopolistic in nature has been in jeopardy of oil price fluctuation and chronic dwindling economic condition. The overdependence on oil revenue due to oil boom and agriculture of 1960s and 1970s has led to decline in the available fund to cater for the standard of living of the populace.

In order to enhance resurgence to the present economic condition in Nigeria, the Federal Government has been making an improvement on the non-oil revenue base most especially taxes (Asaolu, Olabisi, Akinbode & Alebiosu, 2018; Ugwu, Peter & Edolu, 2019). The government has a responsibility of ensuring social and economic wellbeing of the populace through provision of essential amenities to enhance growth and development which call for an effective and alternative means of generating adequate revenue through tax.

In Nigeria, the components of revenue accrued to the Federal Government include oil revenue, non-oil revenue which include the CIT, CED, PPT, VAT, CGT (on companies), Withholding Tax on companies, Tertiary Education Tax, Personal Income Tax of the Nigeria Police Force and Armed Forces, staff of the Ministry of Foreign Affairs and non-resident individuals (Charles, Ekwe & Azubike, 2018; Owuru & Olabisi, 2020). However, with the present economic condition affecting every spheres of life, there is a need for government to develop on existing tax reform system which is presently not yielding the desired result as there exist a persistent and gradually degrading in the prices of oil in Nigeria.

Several studies have tried to establish the link between government tax revenue and economic growth (Joseph & Omodero, 2020), (Owuru & Olabisi, 2020), (Nwauzor, 2020), Egbadju and Eremiokhale (2020) considered the effect of federally collected revenue on the standard of living of the populace in Nigeria However, this study goes an extra mile in considering the relationship between four of the federally collected tax revenues which include the PPT, CIT, VAT, CED and the RGDP as a proxy for the economic growth. Therefore, the following research questions were addressed by the study:

- To what magnitude is the association between the PPT and the RGDP in Nigeria?
- To what level is the link between the CIT and the RGDP in Nigeria?
- What is the level of association between the VAT and the RGDP in Nigeria?
- What is the magnitude of association between the CED and the RGDP in Nigeria?
- To what extent is the impact of federally collected tax revenue on the RGDP in Nigeria?

REVIEW OF RELEVANT LITERATURE - HISTORICAL BACKGROUND OF NIGERIAN TAX SYSTEM

The Nigerian tax system is historical as it dated back to 1904 when the Northern Nigeria introduced the Personal Income tax before the amalgamation. Tax is a compulsory levy and until 1930s, there was no formal tax policy in Nigeria. Although there are there different tax reforms and tax rates in Nigeria, the rate of tax revenue to the total GDP is very low even when compared with other emerging economies as Nigeria derives bulk of its revenue from oil sector at the rate of 75% between the period of 1981-2018 (Osunkwo, 2020).

PETROLEUM PROFIT TAX (PPT)

The PPT is governed and regulated by PPT Act (1959) and it is imposed on the chargeable profit of all oil-producing companies in Nigeria engaging in petroleum operations in Nigeria (Adegbie & Fakile, 2011). PPT is a lion source of revenue generation in Nigeria as a result of huge money derives from it from time to time. PPT is a tax imposes on incomes derives from the petroleum activities or operations. The PPT Act (1990) stated that companies involve in the extraction of petroleum produce as well as transportation of same should pay tax. PPT is charged on the upstream operations which relates to royalties, rents, oil mining, sale of oil and other related substances (Nwala & Gimba, 2019; Inimino et al, 2020).

H01:There exist no significant association between the PPT and the RGDP in Nigeria

COMPANIES INCOME TAX

The companies income tax is a subset of direct taxes as the companies bear the burden as well as the incidence of taxes. The FIRS is the relevant tax authority that has the responsibility to assess and collect the tax. The CIT is regulated by the Company Income Tax Act CAP 60 L.F.N 1990, Act CAP. C21 L.F.N. 2004 and reviewed last in December, 2007. The CITA is the prime law in charge of governing and regulating the companies' tax in Nigeria. The tax is imposed on the profit emanated from the operations or the activity of registered companies such as profit of non-residence companies but carrying out business or businesses in Nigeria, the limited and the public limited liability companies in Nigeria.

H02: There exist no significant link between the CIT and the RGDP in Nigeria

VALUE ADDED TAX (VAT)

VAT is an indirect tax introduced by Decree 102 in 1993 but fully implemented in early 1994 (Nwala and Gimba, 2019; Ugwu, Peter and Udolu, 2019). VAT could be referred to as a tax levied on the consumption of goods and services which is charged at each level of consumption chain in which the burden is borne by the final consumer. Many developing such as Cote d'Ivore, Benin Republic, Senegal, Kenya, Mauritius, Madagascar, Nigeria and Togo as well as over 160 countries of the world have introduced VAT into their tax revenue base and has been a means of consistent means of revenue source to the government of those countries (Agbo and Nwadialor, 2020; Onwuchekwa & Aruwa, 2014).

H03: There exist no significant association between the VAT and the RGDP in Nigeria.

CUSTOMS AND EXCISE DUTIES (CEDS)

CEDs are form of taxes being administered by the customs authority in Nigeria. Customs duties can either be import duties and export duties (Laura, 2019). Import duties are taxes on the importation of goods and services from other countries into Nigeria either which can be imposed as an amount fixed or as a percentage of the value of imported goods and services while the export duties can be described as taxes on exportation from Nigeria to other countries (Akhor and Ekundayo, 2016).

H04: There exist no significant association between the VAT and the RGDP in Nigeria

THEORETICAL REVIEW

1. **The Laffer Curve Theory**
2. **The Signalling theory**
3. **The Expediency Theory**
4. **The Socio-Political theory**
5. **Harrod-Domar Theory of Growth**

EMPIRICAL REVIEW

The study of Inimino et al (2020) investigated the association between the PPT and the Economic growth in the Nigerian context within years 1980-2017. The study adopted Econometrics method of Generalised Methods of Moments (GMM) and Granger Causality test. The outcome indicated that the PPT has a statistically significant and positive association with the Economic growth in Nigeria and that PPT has impacted immensely to the growth of the economy in Nigeria and that the government should make tremendous effort in alleviating tax evasion.

The study of Ugwu et al, (2019) established VAT revenue impact on the revenue total in Nigeria. The data spooled covered the period of 1994-2017 (24 years). The data was analysed using the multiple regression analysis of STATA. The outcome indicated that VAT has a statistically significant effect on the total revenue of the Nigeria government.

Gbegi, Adebisi and Bodunde (2017) determined the effect of PPT on performance considering the profitability of the listed Oil and Gas (O&G) companies in Nigeria focusing on ten (10) listed oil and gas companies for years 2011-2015 (5 years). The study adopted panel data and the data was analysed the multiple regression analysis method. The study discovered that the PPT had as statistically effect on the profitability of the (O&G) listed in Nigeria. The study recommended a reduction in the tax for the listed (O&G) companies in Nigeria so as to help them strive in the current condition.

The study of Inyiama and Ubesie (2016) determined the impact of CIT and VAT on the economic growth in Nigeria. The study concluded that the CIT and the VAT are some of the major contributors to the economic growth in Nigeria as there is a significant positive association between the CIT, VAT and GDP in Nigeria.

METHODOLOGY

The study adopted an expost-facto research design. The time series data for the study were extracted from the CBN annual statistical bulletin, the annual report of the FIRS and the Organisation for Economic Cooperation and Development Statistics (OECD). The dependent variable is the economic growth proxied by the RGDP and the independent variables comprises the PPT, the CIT, the VAT and the CED. The data coverage is 39 years which is from 1981-2019. The data spooled was analyse using the Multiple Regression Analysis of SPSS 26.0.

Model Specification

$Y = f(X1, X2, X3, X4)$

$Y = RGDPt$

$x1 = PPTt$

$x2 = CITt$

$x3 = VATt$

$x4 = CEDt$

$$RGDPt = \alpha + \beta 1PPTt + \beta 2CITt + \beta 3VATt + \beta 4CEDt + \varepsilon t$$

Where:

Y = is the Real Gross Domestic Product (RGDP)

PPTt = Petroleum Profit Tax at time t

CITt = Companies Income Tax at time t

VATt = Value Added Tax at time t

CEDt = Customs and Excise Duties

β = Beta Coefficient

α = Constant term

ε = Error term.

The Apriori Expectation

The Apriori expectation is that all the variables of interest should have positive and significant impact on the Real GDP

DATA ANALYSIS

Table 5		Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	17984.267	777.378		23.135	.000		
	PPT	.004	.001	.131	4.388	.000	.855	1.170
	CIT	.002	.003	.033	.862	.395	.533	1.876
	VAT	.053	.003	.914	15.274	.000	.214	4.675
	CEDS	.002	.004	.027	.471	.641	.239	4.181

a. Dependent Variable: RGDP

Table 4		ANOVA[a]				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15168863376.992	4	3792215844.248	317.824	.000[b]
	Residual	405681692.440	34	11931814.484		
	Total	15574545069.432	38			

a. Dependent Variable: RGDP

b. Predictors: (Constant), CEDS, PPT, CIT, VAT

The Regression analysis table 3 above revealed the value of R2 = 0.974 and the adjusted R2 of 97.1% which indicated that 97.1% variation in the Real Gross Domestic Product is as a result in the variation of federally collected tax revenue in Nigeria which include PPT, CIT, VAT and CED. This can be further explained that 97.1% changes in the real gross domestic product can be predicted from the changes in the variables (The Petroleum Profit Tax, the Companies Income Tax, the Value Added Tax and the Customs and Excise Duties). The model summary indicated p-value = 0.000 < 0.005 indicating that the model is best fit for the study. The Durbin-Watson value indicated 1.331 which reveals absence of autocorrelation.

Testing each hypothesis for the study from the t-statistics and the probability of each variable it could be depicted that the PPT has a positive and significant effect on the RGDP with the t-statistics = 4.388, p-value = 0.000 < 0.05. The result also indicated a positive and statistically insignificant impact of CIT on the RGDP with t-statistics = 0.862, p-value = 0.395 > 0.05. The study revealed that there is a positive and statistically significant impact of VAT on the RGDP at t-statistic = 1.53, p-value = 0.000 < 0.05. Lastly, there is a positive and statistical insignificant impact of CED on the RGDP with t-statistic = 0.471, p-value = 0.641 > 0.05.

DISCUSSIONS AND TESTING OF HYPOTHESES

H_{01}:The PPT has no significant relationship between the PPT and the economic growth in Nigeria.

From the result of correlation analysis table 2 stated above, the study revealed a strong, positive and significant relationship between the PPT and the RGDP. The result is in line with the studies of Ojutawo, Adegbie, and Salawu (2020), Osunkwo (2020), Awa (2020), Inimino Yahaya and Bakare (2018). The study revealed the significance of revenue emanated from the PPT to the total revenue base of the country as well as in enhancing the growth and the development of the country. Therefore, the study rejects the null hypothesis and conclude that there is a positive and statistically significant relationship between the PPT and the economic growth in Nigeria.

H_{02}:The CIT has no significant relationship with the economic growth in Nigeria

The study from the correlation analysis revealed a positive relationship between the CIT and the RGDP which is line with the study of Osunkwo (2020), Awa (2020), Yahaya and Bakare (2018). It is an indication that Companies Income Tax (CIT) still contribute immensely to the revenue base in Nigeria if properly administered and collected. Therefore, the study rejects the null hypotheses and conclude that there exists a significant relationship between the CIT and the economic growth in Nigeria.

- H_{03}: *The VAT has no significant relationship with the economic growth in Nigeria.*
- The result of correlation analysis indicated positive, strong and significant relationship between the VAT and the RGDP. The result is line with the study of Inyiama and Ubesie (2016) that revealed the VAT and CED are some of the major contributors to the economic growth in Nigeria. The findings of the study were contrary to that of Olaoye and Ayeni (2018) that concluded that VAT and CED has no significant relationship with the economy growth proxied by the (GDP). Therefore, the null hypothesis is rejected

- H_{04}: *The CED has no significant relationship with the economic growth in Nigeria*
- The outcome of the study from the correlation analysis revealed that a positive, strong and significant relationship exist between the CED and the RGDP. The result of the study supported the study of Ibanichuka, Akani and Ikebujo (2016) which stated that the CED has a positive relationship with the economic development in Nigeria.

CONCLUSIONS AND RECOMMENDATIONS

The study revealed that all the Federally collected taxes considered in the study (PPT, CIT, VAT & CED) had a positive, strong and significantly related with the economic growth in Nigeria proxied by the RGDP. Therefore, the study recommended further improvement on the existing tax administration system which include:

1. The Federal government should imbibe the best practices of tax administration, collection and implementation of the developed countries and faithfully, judiciously and considerably applied it to better and improve the economic and social wellbeing of the populace.

2. The Federal government should improve on the existing technological infrastructure in Nigeria that will foster smooth implementation of e-tax system in Nigeria.