RESEARCH ARTICLE

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Appraisal of Self-Assessment Tax Policy in Nigeria

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ABSTRACT

Implementation of self-assessment policy is seen as enhancing tax revenue generation, reducing operational cost and operating in line with international best practices. This study was designed to appraise the self-assessment tax policy in Nigeria by exploring income streams from CIT, PPT, VAT against GDP (at current basic prices) and annual budgets from 2002 to 2019. The study applying Ordinary Least Square statistics revealed the tax streams impacted GDP both in the pre and post self-assessment periods though their impacts varied. The efficiency of the implementation of the self-assessment policy tested using tax to GDP ratio and tax to budget ratio revealed pre self-assessment period performing better than the post self-assessment period as pre self-assessment period tax to GDP ratio is 6.63 per cent as against post self-assessment period tax to GDP ratio of 4.23 per cent. Also, pre self-assessment period tax to budget ratio is 119.62 per cent as against post self-assessment period ratio of 92.18 per cent. This is attributable to decline in performance during the post self-assessment period as a result of reduction in petroleum profit taxes occasioned by decline in taxable profits of companies operating in the petroleum sub-sector due to slump in global crude oil prices. The study also found Nigeria's tax to GDP ratio to be far below average in other regions and the lack of harmonization of tax revenues by States and the federal government for a realistic evaluation.

Keywords: Self-assessment; gross domestic product; petroleum profit tax; company income tax; value added tax.

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I. Introduction

Taxation has been a major driver funding social-economic sectors of nations. Tax to gross domestic product (GDP) ratio among OECD countries in 2018 stood at 34.3 per cent, while Denmark, Turkey, USA, Chile and UK had tax to GDP ratios of 44.9, 24.4, 25.8, 21.1 and 24.3 percentage points respectively, [1]. Nigeria since her independence in 1960 has depended solely on oil revenue and many scholars have quoted estimations of oil reliance at 85 per cent of government total revenue and accounting for much of her foreign exchange earnings, [2]. The country economy is generally regarded as a mono product economy as agriculture which was the main economic driver was abandoned following the discovery of crude oil in the Niger Delta region of the country in 1956.

Following the drop in the price of crude oil in the international market and the presence of alternative sources of energy, the country over the years have experienced drastic drop in revenue generation from oil with no compensating increase in any other source of revenue accruable to the country. In its quest to diversify the revenue generation from the wasting assets, the country embarked upon various tax reforms aimed at expanding its tax base, tax machinery efficiency and effectiveness in its administration.

The bureaucratic inertia, lack of accountability and transparency by ministerial agencies and officials of the nations has a lethargic effect on tax payers towards taxation, [3]. These inefficiencies identified and the bureaucratic bottlenecks are seen as impediments to an efficient tax administration and tax revenue enhancement.

Therefore it became essential for necessary tax reforms as it is an essential economic policy strategy designed to enhance tax administration. To broaden the country's tax base, enhance efficiency and encourage taxpayers to pay their taxes and in line with international best practices, the Federal Inland Revenue Service (Establishment) Act 2007 was amended by enacting the Tax Administration (Self-Assessment) Regulations, 2011. This amendment set out the processes, procedures and provided standard guidelines for the implementation of self-assessment tax system in processing company income tax, education tax; value added tax, national information technology development tax, petroleum profit tax and personal income tax obligations, [4].

This policy as in [5] is to enhance efficiency in tax administration devoid of corruption, collusion and impartiality by tax officials in the discharge of their services as well as enhancement of courteous and professional service delivery and other forms of tax planning. The reform shifts the responsibility of determining tax liability from the tax authority to the taxable persons. Thus taxable persons are required to determine their taxable income, compute their tax liabilities, pay the taxes in designated banks and file evidence of payment along with the tax returns but ensuring compliance with the relevant tax laws and policies.

In consideration of the acclaimed benefits of enhanced tax revenue generation and minimal operational running cost and the international best practices attributed to the system, this study is geared towards appraising the efficacy of the self-assessment system on revenue generation as against the old policy.

A. Statement of Problem

Nigeria state is adjudged one of the most underdeveloped countries in the world and according to the World Bank latest survey the poverty capital of the world in 2019. The lack of insufficient funds have enormous challenges ranging from high unemployment and underemployment, high mortality rate occasioned by poor healthcare system, poor/lack of educational and critical infrastructures, high inflation rate to insecurity.

The presence of all these notable glitches coupled with the persistent drop in the prices of crude oil in the international market due to alternative sources of energy necessitated a review of the sources of revenue for the country and a critical examination of the efficiency of the revenue heads in operation. Among the revenue drivers in the country is taxation. Therefore, in its effort to expand the revenue generation out of oil which is a degenerative asset, the country commenced various tax reforms with a view at expanding the tax base, improve tax machinery efficiency and effectiveness in the administration which included the self-assessment system in 2011. Considering the perceived benefits in the implementation of the system, this study is designed to appraise the impact and efficiency of the self-assessment system as against direct assessment in enhancing revenue generation and contribution to economic growth.

B. Objective of the Study

The main reason for this study is to appraise the self-assessment tax policies in Nigeria. The specific objectives are:

i) Ascertain the difference between pre and post self-assessment policies on tax generation impact on GDP.
ii) Ascertain the difference between pre and post self-assessment policy tax revenues to budget accomplishment.
iii) Examine the difference between individual tax streams contribution to total tax in post and pre self-assessment tax periods.

C. Research Questions

In other to address the above objectives, the following research questions were postulated:

i) How do post and pre self-assessment policies revenues (Company Income Tax, petroleum profit tax and Value Added Tax) impact GDP?
ii) What difference in mean value between post and pre self-assessment policies tax revenue to budget accomplishment?
iii) What mean difference between individual tax streams contribution to total tax in post and pre self-assessment tax periods?

D. Hypothesis

The following hypotheses were tested to appraise the pre and post self-assessment tax policies.

i) There is no significant mean difference in revenue generation/efficiency between post and pre self-assessment tax policies on tax generation impact on GDP.
ii) There is no significant mean difference between post and pre self-assessment tax policies revenue to budget accomplishment.
iii) There is no significant mean difference between individual tax streams contribution to total tax in post and pre self-assessment tax periods.

II. Review of Literature

A. Theoretical Review

Taxation influence on economic growth is of concern to governments, tax experts and tax officials. It is also of interest to academics and researchers. Reference [6] in linking taxation postulated that a modification in a tax environment changes concerned preferences through the equilibrium of the economy ultimately affecting the rate of growth.

Since the effect of taxation on economic growth covers both tax revenue generation and tax policies, this study reviewed taxation theories linking the impact of tax revenue on economic growth. Certain tax theories are on the assumption that there is no need for relationship between paying tax by citizens and enjoying benefits from government [7]. Benefit Received Theory: The theory arose from the shortcomings observed in the cost of service theory. The theory is the transformation of the cost of service theory as it ensues on the postulation that essentially there is a swapping link between taxable persons and the State. The State makes available infrastructure and facilities to the Society and the tax payers are obligated to pay for the services sine qua non to the benefits received [7].

Attribution Theory: Heider was the first to propose the psychological theory of attribution. However, among those that developed the theoretical framework is Weiner who focused the theory on achievement. Attribution in psychology refers to the interpretation made about the motive behind an action or behavior. Motive is the psychological spur that leads people to think, act or behave in a defined way. Defining motivation, Bernard Weiner stated it as ‘the study of why people think and behave as they do’. The theory focuses on the relationship between motivation and behavior attribution. The theory succinctly explains what motivates taxpayers to voluntary compliance to tax obligations. Every action or decision has two potential attributes (explanations) – external and internal attribute. Under external attribution, causality is assigned to an outside agent or force while under internal attribution; causality is assigned within the person (or the taxpayer). In this instance the taxpayer is fully aware of the importance of tax revenue to a modern society and values the responsibilities of a good citizen. Thus the motivation to meet tax obligations is from within. It is this kind of motivation the self-assessment system seeks to achieve, by

urging taxpayers to determine their tax liability by themselves, [8].

This study is anchored on the Benefit Received Theory and Attribution Theory. This is premised on that fact that while tax payers expect judicious and transparent use of the taxes paid for the setting up of infrastructural facilities, social and health services, they are fully aware of the importance of tax revenue to economic growth and development and values their responsibilities as good citizens and are thus motivated to voluntarily meet their tax obligations. Many individuals and organizations evade tax not only because of their selfish motive but because there is no corresponding response by government in terms of good governance and transparency in the setting up of infrastructural facilities and social services to the citizenry, [9]-[11].

B. Value Added Tax

This tax is regulated by Value Added Tax Act 2007. This tax is payable on supply of taxable goods and services and is assessed at the rate of 7% on all taxable goods and services. Businesses and individuals usually pay VAT when they purchase goods and services and charge VAT on goods and services being sold by them. At the end of a given period (usually monthly), businesses are required to file their VAT returns to the FIRS. This is done by comparing the amount of VAT paid on goods and services purchased (known as input VAT) with the amount charged on goods and services sold (known as output VAT). The net amount in the period is the amount to be remitted to the Revenue, [12].

C. Company Income Tax

The Company Income Tax is regulated by the Company Income Tax Act (2011) and managed by Federal Inland Revenue Service. The law deals with the assessment and collection of taxes from all companies operating as limited liability companies with the exception of those operating in the petroleum sub sector. Section 40(1) of Company Income Tax Act (CITA) specifies a tax rate of 30% of chargeable profit while Section 40(6) stipulates a tax rate of 20% for companies operating in either the manufacturing, agricultural, mining sectors or the company is completely into export trade and earns a total gross turnover of below one million naira for the first five (5) years of assessment, [13].

D. Petroleum Profit Tax

The Petroleum Profit Tax is regulated by the Petroleum Profit Tax Act (PPTA) (2002). It is under the administration of the Federal Inland Revenue Board and the tax is on profits of companies engaged in petroleum operation. The Act defined Petroleum Operations as “the winning or obtaining and transportation of petroleum or chargeable oil in Nigeria by or on behalf of a company for its own account by any drilling, mining, extracting or other like operations or processes, not including refining at a refinery, in the course of a business carried on by the company engaged in such operations, and all operations incidental thereto and any sale of or any disposal of chargeable oil or on behalf of the company”. The tax rate on chargeable profit in any accounting period is 85% of the company’s chargeable profit [14].

E. Tax Reforms in Nigeria

In an effort to increase tax revenue as a composite revenue source, various reforms aimed at expanding the tax base, enhance efficiency and effectiveness in tax administration have been embarked upon by government. As stated in [3], the carefree attitude of people in developing nations towards tax obligations is as a result of various factors among which is lack of accountability, transparency by government officials governments and the bureaucratic inertia by ministries, agencies and departments (MDA). Also the reform is seen as part of the fundamental fiscal policy strategy of government in enhancing efficient tax management.

F. Tax Performance Indicators

Tax efficiency can be measured in any fiscal year through tax revenue to gross domestic product, actual tax revenue to targeted or budgeted tax revenue or tax revenue to total revenue.

G. Tax Revenue to GDP Ratio

Tax revenue to gross domestic product (GDP) is one way in measuring efficiency of the tax system. The ratio offers a better measure of the rise and fall in tax revenue in any fiscal year than simple numbers. The method also evaluates the contribution of taxation to economic growth [15]. This ratio which highlights succinctly performances over a given time period is a good barometer for measuring efficiency of tax administrators and effectiveness of any given tax policy in operation.

H. Actual to Target Tax Revenue

Another method adopted in measuring efficiency of a tax system and collection is determining the ratio of actual tax revenue generated against budgeted revenue projection in a given fiscal year. Here the revenue earned from taxes is measured against budgeted revenue projection in the year. This ratio is a performance indicator used to appraise either tax administrators’ efficiency in service delivery or appraising relevant tax policies by examining the extent of their efficiency in meeting budgeted targets.

I. Taxation and GDP

One of the indices used in measuring economic growth in any country is the GDP. Although some people think otherwise of GDP as a predominant measure of measuring growth, its application as a proxy for measuring economic growth is primarily due to the ease of computation as against multi-dimensional index that can measure other welfare achievements [16].

Reference [17] VAT and CIT clearly and pointedly stimulate investment in Nigeria and therefore recommended a review of tax policy and administration to expand the tax base.

J. Self-assessment

In order to encourage voluntary compliance and reduce administrative cost, many countries have enacted laws and amended their regulations that allow the taxpayer to play a leading role in the process leading to tax determination and payment. This approach is referred to as the Self-Assessment System. In Nigeria the practice commenced in 1996 with companies with a turnover of =N=1 million and

below were required to file-assessment returns. However in order to broaden Nigeria's tax base , enhance efficiency and in line with international best practices, the Federal Inland Revenue Service (Establishment) Act 2007 was amended by enacting the Tax Administration (Self-Assessment) Regulations, 2011 which empowers all taxpayers to file assessment returns. The amendment of the Act set out the processes, procedures and provided standard guidelines for the implementation of self-assessment tax system in processing company income tax, education tax; value added tax, national information technology development tax, petroleum profit tax and personal income tax obligations.

Two conditions must be present for tax assessment system to be implemented referred to as primary and secondary conditions [18]. The primary function involves; determination of a taxpayer's liability which involves the ascertainment of taxable income, knowing and deducting allowable expenses, application of relevant tax reliefs and allowances, computation of chargeable income and application of the appropriate and applicable tax rates. The secondary function or condition in the other hand involves; checking the correctness of the tax returns submitted by the taxpayers using various auditing techniques and imposing sanctions for non-compliance.

Under self-assessment system, the primary function responsibility is shifted to the taxpayer. Although in developed economies, taxpayers engage auditors to carry out the responsibility of rendering their tax returns, unfortunately in Nigeria the taxpayers may lack the knowledge, competence, skill and honesty required to assume the responsibility. This anomaly is capable of having a negative effect on the efficiency of the self-assessment system in Nigeria. However, studies in Malaysia and Indonesia showed enhance voluntary compliance by taxpayers, [19]; [20].

K. Empirical Review

A study that examined the impact of tax knowledge, self-assessment system and tax awareness on taxpayers' compliance in Banda Aceh City showed tax knowledge, self-assessment system and tax awareness having significant impact on tax compliance [21].

In the study as in reference [22] which determined the impact of the Self-Assessment System of taxation on the revenue generation in Nigeria considering tax revenues for the period 2003 to 2018, the study period was segmented into Pre Self-Assessment and Post Self-Assessment periods and adopted GDP as the moderating variable to measure efficiency. The result of the study showed decline in efficiency measured by tax/GDP ratio as the Post Self-Assessment period recorded tax/GDP ratio of 5.07% as against Pre Self-Assessment period that recorded tax/GDP ratio of 6.23%. By the result the anticipated improvement in tax revenue following the implementation of self-assessment system is not achieved.

The study to determine the impact of awareness of the taxpayers and penalties for default for the effectiveness of self-assessment system in Indonesia revealed taxpayers' awareness and default penalties have positive impact to the efficiency of self-assessment system implementation [23].

Kasipillai and Hanefah as in [24] in assessing the perception of tax professionals towards the introduction of self-assessment system in Malaysia and tax professional preparedness for the implementation identified complex tax laws and regulations as well as high tax rates in Malaysia as compared to other ASEAN countries. Looking at the policy and tax payment and fraud, Hutauruk *et al*. as in [25] concluded that self-assessment system had a positive and significant effect on tax payment and the possibility of tax fraud and avoidance by taxpayers in its implementation.

Lutfillah and Setiyawati postulated as in [26] that corporate taxpayers report and pay tax obligations as a formal taxpayers' compliance that comes from rules and obligations but that the compliance is tainted with dishonesty in tax computation.

In their study Ojong *et al*. as in [11] which investigated the impact of tax revenue on economic growth in Nigeria revealed a significant and very positive relationship between PPT, and CIT although non-oil revenue did not impact significantly in economic growth. The study further revealed good governance and transparency as lacking among officials which greatly discourages taxpayers to abide willingly with tax obligations thus leading to tax leakages.

Likewise Ogbonna and Appah as in [27] investigated the impact of tax reform on economic growth in Nigeria for the period 1981-2007 and revealed disparities in all the income taxes with positive coefficients thus confirming tax reforms stimulates economic growth. Similarly, Appah and Ebiringa as in [28] examined the connection between petroleum profit tax and economic growth in Nigeria and established the presence of a long run stability relationship between gross domestic product (GDP) and petroleum profit tax as well as the presence of positive and significant relationship between PPT and economic growth.

While in their examination of the effect of revenue from taxation on economic growth in Nigeria, Worlu and Emeka as in [29] opined tax revenues stimulate infrastructural growth and development, Uzoka and Chiedu as in [30] which studied the effect of revenues from taxation on economic growth revealed a significant effect from PPT, CIT and VAT on economic growth. The study however showed that CED, CGT and EDT have no major effect on economic growth.

The study by Okwara and Amori as in [31] which examined the effect of tax revenue on growth in Nigeria highlighted VAT as having statistically negative impact on economic growth measured by GDP. However, Adereti *et al*. as in [32] study showed VAT having a significant impact on economic growth as there exist a positive and significant correlation between VAT and GDP. On revenue generation, Onaolapo *et al*. as in [33 study established a positive and significant impact of VAT on revenue generation in Nigeria.

Mulugeta study as in [34] exploring the implementation of self-assessment tax system and its impact on tax compliance level of the taxpayers showed the lack of knowledge by taxpayer of tax laws and procedures and thus affects the application of self-assessment system and effective tax collection enforcement.

Masud *et a*l. study as in [35] examined the difference in tax compliance and the complexity pre and post implementation of self-assessment system in Nigeria and

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found a "slightly higher" but statistically insignificant post self-assessment system tax compliance. The study also found that tax laws were slightly less complex but statistically insignificant under self-assessment system.

While Appah and Ogbonna study as in [36] that investigated the relationship between self-assessment compliant rate and revenue generation in Nigeria found a strong relationship between self-assessment compliant rate and revenue generation, Eluro as in [37] investigating the determinants of compliance under the self-assessment system in Nigeria found that tax complexity is a major cause of tax non-compliance under the self-assessment system in Nigeria.

III. Methodology

A. Research Design

The independent variables for this study consist of revenues from; Company Income Tax (CIT), Petroleum Profit Tax (PPT), Value Added Tax (VAT), Gross Domestic Product Growth (GDP) at current price and annual budget estimates for the period 2002 to 2019. Efficiency of the tax policies is measured by tax to GDP ratio and tax to budget ratio for the pre and post self-assessment periods. The data were sourced from the Central Bank of Nigeria (CBN) 2019 Statistical Bulletin and Federal Inland Revenue Service (FIRS).

B. Techniques of Data Analysis

Based on the perceived causal relationship between the dependent and independent variables of the research, a Multiple Regression model which is stochastic in nature was adopted. In estimating the impact of tax revenue on GDP, the study employed the Ordinary Least Square (OLS) technique. The data obtained were also analyzed using descriptive statistic techniques.

C. Model Specification

The functional model of this study is specified thus:

$$GDP = f\ (\text{taxation}) + \tau$$

where GDP (Dependent Variable).

Taxation (Explanatory/Independent Variable) = CIT, PPT, VAT

$$GDP = \int(CIT, PPT, VAT) \quad (1)$$

where

$$GDP = \beta o + \beta 1CIT + \beta 1PPT + \beta 3VAT + \tau \quad (2)$$

where:
$\beta 0$ = Constant term (Intercept).
$\beta 1\text{-}3$ = Coefficient of parameters of taxation.
μ = Stochastic error term.
A priori = $\beta 0 > 0$, $\beta 1 > 0$, $\beta 2 > 0$, $\beta 3 > 0$.
μ = Error term (Stochastic Term).

IV. Data Analysis and Discussion

A. Data Analysis Test of Hypotheses

H_1: There is no significant mean difference in revenue generation/efficiency between post and pre self-assessment tax policies' on tax generation impact on GDP.

The result of tax generation to GDP in pre and post self-assessment periods is shown in Tables 1 and Table 3. Whereas tax generation to GDP ratio stood at 6.63% in pre self-assessment period, in the post self-assessment period the tax generation to GDP ratio dropped to 4.23%. This result supports earlier studies as in [22]. Studying individual relationships of CIT, PPT and VAT with GDP, the result in Table 6 revealed positive relationships between CIT, PPT and VAT with GDP in the pre self-assessment period arising from their correlation values of 0.969, 0.428 and 0.982. However, the post self-assessment period showed a positive relationship between CIT and VAT with GDP but a negative relationship between PPT and GDP as stated by their correlation coefficients of 0.915, -.0.445 and 0.912 representing CIT, PPT and VAT.

The yearly measure of efficiency of tax income generation based on ratio of tax income to GDP in the pre self-assessment period showed the lowest performance ratio of 5% in 2002, 2009 and 2010 and highest performance ratio of 10% in 2005. But the ratio of yearly tax income to GDP in the post self-assessment period showed a sharp decline from highest ratio of 7 per cent in 2011 and 2012 fiscal year to lowest ratio of 3% in 2015, 2016, 2017 and 2019 fiscal years. This average tax to GDP ratio is far below the average ratio in OCED countries whose tax to GDP ratio stood at 34.3% in 2018 (OCED, 2019). Looking at individual countries, Denmark tax to GDP ratio is 44.9%, USA 25.8%, United Kingdom 24.3%, France 46.1%, Chile 21.1% etc, [1]. The result thus shows no evidence of improvement since the implementation of self-assessment policy. Arising from the above the pre self-assessment tax to GDP ratio of 6.63% is fairly higher than the post self-assessment tax to GDP ratio of 4.23%. Therefore we accept the null hypothesis and reject the alternate hypothesis that there is a significant difference between post and pre self-assessment tax policies on revenue generation/efficiency impact GDP.

H_2: There is no significant mean difference between post and pre self-assessment tax policies revenue to budget accomplishment.

In other to ascertain the efficiency of self-assessment, we appraised the policy based on contribution of revenue generation against budgeted/target tax income generation. The result in Table 2 and Table 4 showed total tax to budgeted revenue target ratio of 119.62% in the pre self-assessment period as against a ratio of 92.18% in the post self-assessment period. Analyzing individual tax revenue heads, CIT, PPT and VAT collection to budgeted income ratios stood at 18.22%, 84.01% and 17.38% as against post self-assessment period ratios of 25.57%, 48.63% and 18.98%. The sharp decrease in PPT contribution to budgeted tax revenue may also be attributed to fall in crude oil prices in the global market necessitating fall in turnover thus not meeting target profit projection.

While the yearly measure of efficiency of tax income generation based on tax income to budgeted income in the pre self-assessment period showed highest performance ratio of 182 per cent in 2004 and lowest performance ratio of 82 per cent in 2006, the yearly measure of tax efficiency ratio in the post self-assessment period showed highest performance ratio of 139 per cent in 2012 and lowest performance ratio of 71 per cent in 2015.

Therefore since the result shows no evidence of improvement since the adoption of self-assessment policy and there is a significant difference between pre and post self-assessment policies we accept the null hypothesis and reject the alternate hypothesis that postulates a significant mean difference between post and pre self-assessment policies budget accomplishment.

H_3: There is no significant mean difference between individual tax streams contribution to total tax in post and pre self-assessment tax periods.

The study as revealed in Table 1 and Table 3 showed a modest improvement in the ratios of contribution by individual tax income streams to total tax generation in the post self-assessment period as CIT to tax revenue ratio rose from 15.24% in the pre self-assessment period to 26.66% in the post self-assessment period. Ratio of VAT to tax revenue also improved from 14.53% in pre self-assessment period to 20.59% in the post self-assessment period. However, PPT to tax revenue ratio dropped from 70.23% in the pre self-assessment period to 52.75% in the post self-assessment period. Therefore in view of the modest improvement in CIT and VAT and sharp decline in PPT, there is no significant mean difference between individual tax streams contribution to total tax revenue in post and pre self-assessment tax periods. We therefore accept the null hypothesis and reject the alternate hypothesis. This is contrary to the study as in [25].

TABLE I: PRE-SELF-ASSESSMENT TAX REVENUE AND GDP IN CURRENT PRICE

DATE	CIT(Bil)	PPT(Bil)	VAT(Bi)	Total`	GDP(Bill)	Per
2002	89.10	392.20	108.60	589.90	11,332.25	5%
2003	114.80	683.50	136.40	934.70	13,301.56	7%
2004	113.00	1,183.60	159.50	1,456.10	17,321.30	8%
2005	140.30	1,904.90	178.10	2,223.30	22,269.98	10%
2006	244.90	2,038.30	221.60	2,504.80	28,662.47	9%
2007	275.30	1,600.60	289.60	2,165.50	32,995.38	7%
2008	420.60	2,060.90	401.70	2,883.20	39,157.88	7%
2009	600.60	939.40	481.40	2,021.40	44,285.56	5%
2010	666.06	1,480.36	564.89	2,711.31	54,612.26	5%
Total	2,664.66	12,283.76	2,541.79	17,490.21	263,938.65	
TR/GDP	1.01%	4.65%	0.96%	6.63%	6.63%	
Contri to TR	15.24%	70.23%	14.53%			

Source: Researcher's Computation from CBN Statistical Bulletin, 2019.

TABLE II: PRE-SELF-ASSESSMENT TAX REVENUE AND BUDGETED TAX REVENUE

DATE	CIT(Billion)	PPT(Billion)	VAT(Billion)	Total`	Total Budgeted	%
2002	89.10	392.20	108.60	589.90	396.20	149%
2003	114.80	683.50	136.40	934.70	572.90	163%
2004	113.00	1,183.60	159.50	1,456.10	800.00	182%
2005	140.30	1,904.90	178.10	2,223.30	1,304.40	170%
2006	244.90	2,038.30	221.60	2,504.80	3,054.10	82%
2007	275.30	1,600.60	289.60	2,165.50	1,753.30	124%
2008	420.60	2,060.90	401.70	2,883.20	2,274.40	127%
2009	600.60	939.40	481.40	2,021.40	1,909.00	106%
2010	666.06	1,480.36	564.89	2,711.31	2,557.30	106%
Total	2,664.66	12,283.76	2,541.79	17,490.21	14,621.60	
TR/BUD	18.22%	84.01%	17.38%	119.62%	119.62%	
Contri to TR	15.24%	70.23%	14.53%			

Source: Researcher's Computation from CBN Statistical Bulletin, 2019.

TABLE III: POST-SELF-ASSESSMENT TAX REVENUE AND GDP

DATE	CIT(Billion)	PPT(Billion)	VAT(Billion)	Total`	GDP (N' Bil)	%
2011	659.60	3,070.59	659.15	4,389.34	62,980.40	7%
2012	816.52	3,201.32	710.56	4,728.39	71,713.94	7%
2013	963.55	2,666.37	802.69	4,432.61	80,092.56	6%
2014	1,180.41	2,453.95	802.96	4,437.32	89,043.62	5%
2015	1,229.02	1,097.95	635.35	2,962.31	94,144.96	3%
2016	933.54	1,157.81	828.20	2,919.54	101,489.49	3%
2017	1,215.06	1,520.48	972.35	3,707.89	113,711.63	3%
2018	1,373.21	2,467.58	1,108.04	4,948.84	127,762.55	4%
2019	1,607.32	2,111.43	1,188.58	4,907.33	144,210.49	3%
Total	9,978.22	19,747.47	7,707.88	37,433.57	885,149.64	
TR/GDP	1.13%	2.23%	0.87%	4.23%	4.23%	
Contri to TR	26.66%	52.75%	20.59%			

Source: Researcher's Computation from CBN Statistical Bulletin, 2019.

TABLE IV: POST-SELF-ASSESSMENT TAX REVENUE AND BUDGET TAX REVENUE

DATE	CIT(Billion)	PPT(Billion)	VAT(Billion)	Total`	Total Budgeted	%
2011	659.60	3,070.59	659.15	4,389.34	3,382.27	130%
2012	816.52	3,201.32	710.56	4,728.39	3,404.12	139%
2013	963.55	2,666.37	802.69	4,432.61	4,192.78	106%
2014	1,180.41	2,453.95	802.96	4,437.32	3,681.03	121%
2015	1,229.02	1,097.95	635.35	2,962.31	4,192.18	71%
2016	933.54	1,157.81	828.20	2,919.54	3,751.18	78%
2017	1,215.06	1,520.48	972.35	3,707.89	4,414.65	84%
2018	1,373.21	2,467.58	1,108.04	4,948.84	5,879.34	84%
2019	1,607.32	2,111.43	1,188.58	4,907.33	7,713.59	64%
Total	9,978.22	19,747.47	7,707.88	37,433.57	40,611.13	
TR/BUD	24.57%	48.63%	18.98%	92.18%	92.18%	
Contri to TR	26.66%	52.75%	20.59%			

Source: Researcher's Computation from CBN Statistical Bulletin, 2019.

TABLE V: DESCRIPTIVE STATISTICS

	Pre Self-assessment			Post Self-assessment		
	Mean	Std. Deviation	N	Mean	Std. Deviation	N
GDP	29326.52	14782.64109	9	98349.96	26486.3932	9
Budget Revenue	1624.622	924.02782	9	4512.3489	1418.91268	9
CIT	296.0733	218.4213	9	1108.6922	293.3276	9
PPT	1364.862	604.43571	9	2194.1644	781.35452	9
VAT	282.4211	163.89322	9	856.4311	194.51428	9

Dependent Variable: GDP, Budgeted revenue. Independent Variables: CIT, PPT, VAT. Source: Researcher's SPSS 20.0 Computation, (2020).

TABLE VI: INTER CORRELATION AMONG THE VARIABLES

	Pre self-assessment period					Post self-assessment period				
	Budget	GDP	CIT	PPT	VAT	Budget	GDP	CIT	PPT	VAT
Budget	1.000		0.670	0.743	0.671	1.000		0.859	-0.131	0.876
GDP		1.000	0.969	0.428	0.982		1.000	0.915	-0.445	0.912
CIT	0.670	0.969	1.000	0.222	0.992	0.859	0.915	1.000	-0.397	0.784
PPT	0.743	0.428	0.222	1.000	0.285	-0.131	-0.445	-0.397	1.000	-0.102
VAT	0.671	0.982	0.992	0.285	1.000	0.876	0.912	0.784	-0.102	1.000

Dependent Variable: Budgeted revenue. Independent Variables: CIT, PPT, VAT. Source: Researcher's SPSS 20.0 Computation, (2020).

TABLE VII: MODEL SUMMARY AND ANALYSIS OF VARIANCES (ANOVA) –PRE SELF-ASSESSMENT PERIOD

R	R-square	Adj.square	Std error	R-square change	Durbin Watson
0.995	0.990	0.984	1879.00384	0.990	2.356
Source of variation	Sum of square	df	Mean square	F	P
Regression	1730558543.308	3	576852847.769	163.384	0.000
Residual	17653277.167	5	3530655.4333		
Total	1748211820.475	8			

*Significant at 0.05 level p< 0.05. Dependent Variable: GDP. Independent Variables: CIT, PPT, VAT. Source: Researcher's SPSS 20.0 Computation, (2020).

TABLE VIII: MODEL SUMMARY AND ANALYSIS OF VARIANCES (ANOVA) –POST SELF-ASSESSMENT PERIOD

R	R-square	Adj.square	Std error	R-square change	Durbin Watson
0.992	0.984	0.974	4297.37514	0.984	1.957
Source of variation	Sum of square	Df	Mean square	F	P
Regression	5519895030.745	3	1839965010.248	99.633	0.000
Residual	92337165.444	5	18467433.089		
Total	5612232196.188	8			

*Significant at 0.05 level p< 0.05. Dependent Variable: GDP. Independent Variables: CIT, PPT, VAT. Source: Researcher's SPSS 20.0 Computation, (2020).

V. CONCLUSION

The essence of implementing self-assessment system of tax returns is with a view to enhancing tax administration efficiency and increase tax revenue base. However, reviewing the self-assessment policy implementation by comparing the old policy of the tax authority determining tax liability, the result as showed mean tax revenue to GDP dropping from 6.63 per cent to 4.23 per cent. The study showed the pre self-assessment CIT to GDP ratio of 1.02 per cent improving to 1.13 percent as against post self-assessment ratio of 1.13 per cent while pre self-assessment PPT to GDP ratio dropping from 4.65 per cent 2.23percent in the post self-assessment period. Also VAT to GDP ratio dropping from 0.96 percent in the pre self-assessment period to 0.87 percent in the post self-assessment period.

The study also compared the contributions of the tax revenue streams to budget or target income for pre self-assessment and post self-assessment periods. While 18.22 percent CIT to budget tax ratio was reported in the pre self-

assessment period, 24.57 percent ratio was reported in the post self-assessment period. Also while PPT to budget ratio of 84.01 percent was recorded in the pre self-assessment period as against 48.63 percent in the post self-assessment period, VAT to budget ratio of 17.38 percent was reported in the pre self-assessment period as against 18.98 percent in the post self-assessment period.

The fall in crude oil prices in the international market significantly affected the operations of the oil companies which impacts on its profits and derivable tax thereon. Also, although Nigeria's tax efficiency assessment measured by tax to GDP is deplorable when compared with other countries of the world, the introduction of self-assessment policy further worsen the contribution of tax revenue to GDP. This calls for a rethink by policy makers in Nigeria.

VI. Recommendations

This study considered three tax streams and the absence of reliable data on personal income tax and other taxes administered by the states and local government areas in Nigeria makes definite pronouncement on the contribution of tax to GDP a mirage. It is therefore recommended for States and local government areas to be mandatorily made to render returns that will facilitate the inclusion of all tax revenues in Nigeria as is applicable in other countries.

Secondly, there should be greater tax education and awareness to facilitate expansion of Nigeria's tax base so as to enhance tax revenue to GDP ratio to double digit like other countries. Likewise, while there should be efficiency in tax administration, there should be prudence and transparency by government on the management and utilization of tax resources so has to motivate taxpayers to honor their tax obligations.

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