Innovations

Impact of tax audit and investigation in sustaining tax revenue generated under the self-assessment collection: Nigeria evidence

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Abstract : *The current decline in crude prices emphasises the need to diversify the Nigerian economy. Tapping all the potential for growth and development is the only prudent thing to do in this situation. Given the present pressure on the prices of crude and the crisis created in hitherto mono-product economies like Nigeria, the tendency is to argue in favour of shifting attention away from the petroleum industry. Taxation is one of such avenues through which the government can generate more funds to sustain its economy. Remarkably, the study analysed the effect tax audit and investigation proxy by desk tax audit, field audit, back duty tax audit, and registration audit have on tax revenue generated in Southeast Nigeria. This study used primary and secondary data. The primary data was collected using a well-structured questionnaire administered to 157 selected staff of FIRS and audit firms in Southeast Nigeria. The secondary data were sourced from the FIRS web portal for 2010 to 2021. The data collected were collated and analysed descriptively with the help of inferential methods such as the unit root test, Pearson's correlation test and estimation techniques, the Fully Modified Least Square (FMOLS), and co-integration regression analysis. The findings revealed desk tax audits, field audits, back duty tax audits, and registration audits, on the whole, have a significant positive impact on tax revenue generated in Southeast Nigeria. The study recommends that tax audits and investigations be carried out regularly to ensure that the exact revenue collected is what is remitted to the treasury. In addition, the internal control mechanisms set to test and supervise the staff of the tax audit and investigation department should be strengthened. This will help minimise the level of corruption and hence enhance the effectiveness of the tax audit and investigation.*

Keywords: 1.tax audit, 2.tax investigation, 3.Self-assessment, 4.Tax revenue generated, 5.Fully Modified Least Square co-integration regression

1. Introduction

All over the globe, and Nigeria in particular, taxation is not a new word. Before the coming of the colonial masters, taxation has been in existence. Tax is an indispensable source of revenue for the government at all levels. According to Samuel and Simon (2011), taxation is a system imposing an unavoidable levy on all earnings, goods, services, and properties of citizens by the government.

Taxation in Nigeria is a factor to be reckoned with in the Federal government's budget as the revenue so collected comes back to the taxpayer in the form of services provided by the government. Taxation can be viewed as a significant vehicle for the long-term development of the state's infrastructure (Brima and Festus, 2014). In a dwindling economy like Nigeria, where there is over-dependency on the oil sector, diversification is required to sustain the economy.

An adage says putting all of one's eggs in a basket is risky. Over-reliance on crude oil as the primary source of revenue in Nigeria has left the Nigerian economy perennially vulnerable to the oil market's volatility. As a result, the commodity's price is under pressure. This recent downturn in the price of crude underscores the need to diversify the Nigerian economy from a mono-product to a more inclusive, industrial economy as a matter of urgent priority. Relying on the words of Aliko Dangote, a renowned Nigerian businessman," the drop in oil prices will allow us to diversify the economy. This could be a blessing; there will be pains, but good things do not come without pain". Diversification promotes growth and development and generates employment for the teeming youthful population (Israel, 2016).

It is our view that while the current decline in crude prices emphasises the need to diversify the Nigerian economy, tapping all the potential for growth and development is the only prudent thing to do. Given the present pressure on the prices of crude and the crisis created in hitherto mono-product economies like Nigeria, the tendency is to argue in favour of shifting attention away from the petroleum industry. Taxation is one of such avenues through which the government can generate more funds to sustain its economy (Israel, 2016).

To enhance the tax revenue generated, reduce operational costs and operate in line with international best practices, the Nigerian tax system introduced the self-assessment tax collection (SATC) method in 1991. The SATC system is a system of tax administration by which the taxpayer by law is allowed to compute his tax liability, pay his tax due at the selected bank and after which produce evidence of the tax paid at the time of filing his tax return on the due date at the tax office. Conversely, the tax authority is responsible for checking on the taxpayers to ensure that they comply with the tax administration process. This implies the self-assessment scheme is characterised by partnership and shared roles and responsibilities between the taxpayer and the tax authority (Appah, 2013)

Tax is an essential source of revenue to the government of any state, so it is as good as nothing when potential and prospective taxpayers fail or delay in payment. On a normal, taxpayers are always unwilling to pay their tax liability. As a result, there is a need to motivate them seductively or use force on them to pay up. As a result, tax audits and investigations have helped generate revenue for the government to a greater extent (Onoja and Iwarere, 2015).

Tax audit and investigation is the proper examination of the tax report of taxpayers, both companies and individuals, by the relevant tax authorities. This is necessary to ascertain compliance with the state's applicable tax laws and regulations. In addition to this, tax audit and investigation is a process where the tax authorities, Federal Inland Revenue Service (FIRS) and State Board of Internal Revenue Service authenticate the numbers that taxpayers have put in their tax returns (Kircher 2008).

It is always the trust of the government that the only means to sustain improvement in tax revenue is to entrench an effective and efficient tax administration that could probably enable her to harness the tax revenue potentials at her disposal. Ezugwu and Akubo (2014) maintain that without raising revenue efficiently, states will be constrained on how they can make available security, meet basic needs or foster economic development. Thus taxes underwrite the capacity of the states to carry out their goals. This means that any change in the tax administration system aligns with the tax policy direction to help the government achieve the maximum revenue needed to run the affairs of public concerns.

The Federal Inland Revenue Service (FIRS) Tax Revenue Statistics disclosed annual tax revenue collection achievements in the southeast within the eleven (11) years' time series in line with CIT, EDT, VAT and CGT objectives and scope. According to the statistics, CIT yielded ₦12.138 trillion, EDT yielded ₦3.004trillion, Vat yielded ₦41.714trillion, and CGT yielded ₦228.709trillion. These revenues were generated from 2010 to 2020 (FIRS web portal, 2021). When this development is related closely to the increasing need for the fund for the government programs and projects, it becomes essential to note the expectation gap between tax revenue achievements and the relative economic reality of the time. This apparent slack could be attributed to less effective tax audit and investigation operations in administering taxes by the tax authorities.

In Nigeria, tax laws and tax administration regulations are expected to make significant provisions, with powers to obtain taxpayers' records, accounts, and information on taxpayers' business by legitimate means. However, such legal instruments are not sufficient. The tax authorities find it challenging to use them meaningfully where they exist. It, however, follows that the issues of unclear delineation of tax jurisdictions among tax authorities have hampered the positive Implementation of self-assessment (Okauru, as cited in Olurankinse and Oladeji, 2017). Where this is the case, the tax officers' conflict may be due to a lack of planning and a lack of well-trained personnel experienced in tax audits and investigations.
Challenges associated with engaging unqualified, inadequate tax personnel and fraudulent activities of some tax collectors contribute to poor tax revenue collection achievement in Nigeria over the years (Madugba, Ekwe and Kalu, 2015). To strengthen the competence of tax officials, FIRS had in 2012 embarked on the recruitment of experienced personnel strategically to reform tax audit and investigation functions.

It is a concern to address, especially now that the government aims to improve tax revenue driven by the non-oil revenue policy of the Nigeria tax system as the economy is suffering the consequences of the COVID 19 outbreak. A key policy of the government of any state is how to discourage evasion and maximise compliance with tax laws. Tax audits and investigations aim to compel the taxpayers to comply with the tax laws and regulations.

In the last couple of years, tax audits and investigations have been a critical issue often discussed in Nigeria on how to increase the revenue generated to help in sustaining the country. The tax officials have had lots of sleepless nights, trying to evaluate the taxpayers' books to increase the revenue of the government to sustain the economic (Adediran, Alade, & Oshode 2013). The question now is, to what extent has tax audit and investigation helped contribute to the revenue generated in Southeast and Nigeria, especially now that the economy is suffering the consequences of the COVID 19 outbreak? The argument above prompted the formulation of the hypotheses below:

Ho   Tax audit and investigation significantly impact capital gains tax revenue generated in southeast Nigeria.

Ho   Tax audit and investigation significantly impact company income tax revenue generated in southeast Nigeria.

Ho   Tax audit and investigation significantly impact value-added tax revenue generated in southeast Nigeria.

Ho   Total tax revenue generated in the southeast significantly impacts Nigeria's total tax revenue.
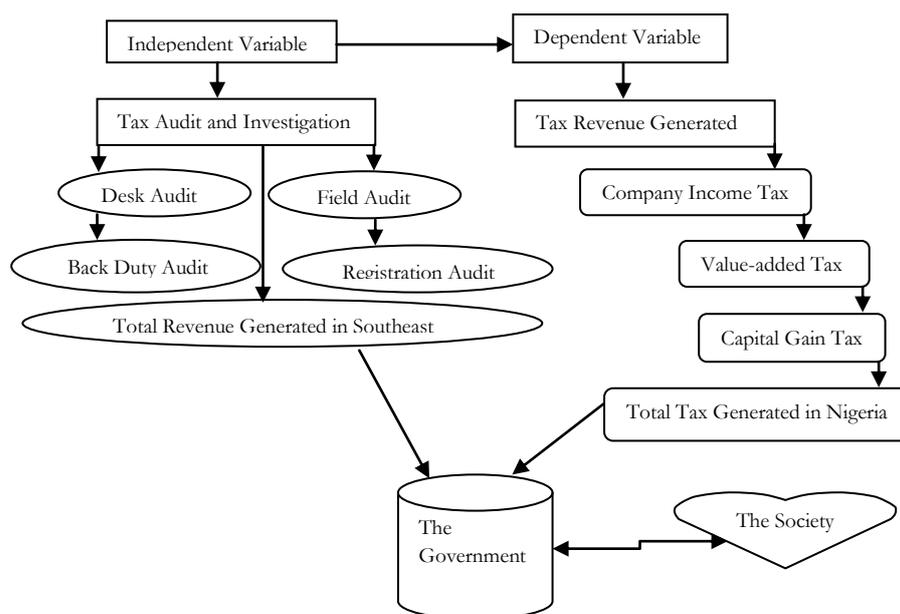
2.1   Review of Related Literature

Figure 1: Conceptual Framework

2.1.1 Tax Audit and Investigation

According to Kircher (2008), a tax audit assesses taxpayers' tax reports by the relevant tax authorities to determine compliance with the state's applicable tax laws and regulations. It is a special audit carried out

by tax officials from relevant tax authorities with an approach and range of work that somewhat differs from that carried out for audit under the Companies and Allied Matters Acts; CAMA1990 (The Institute of Chartered Accountants of Nigeria; ICAN, 2014, Pg 91). Tax investigation, conversely, is different from tax audit because it would be carried out when a taxpayer is suspected of having committed tax fraud in the form of tax evasion, which might be owing to failure to file tax returns; filing of unfinished or inexact returns; failure to register for tax purposes. The activity is conducted mainly by tax inspectors who have thorough training and proficiency in investigation techniques with or without the help of police investigators (ICAN, 2014, pg 104).

Adediran, Alade and Oshode (2013) stipulate that a tax audit, just like a financial audit, entails assembling information and processing it to determine the level of conformity of an organisation with the tax laws of the region. Accordingly, Chude and Chude (2015) defined an Audit as "an official examination of a business and financial records to see that they are true and accurate." The Association of Chartered Certified Accountants described an audit as an exercise that assures shareholders and other stakeholders of a corporation on the financial statements as it is independent and unbiased. Onoja and Iwarere (2015) stipulate tax audit and investigation has helped the government generate revenue.

From the discussion above, a tax audit is the independent assessment of the taxpayer's books of account by a group of the experienced support staff of the revenue authority, known as tax auditors. On the order hand, tax investigation is an independent evaluation of the book of accounts of individual, corporate or incorporated entities assumed to have committed tax fraud in the form of non-remittance or under-remittance of tax payable. ICAN (2014, pg 91) conceptualised the basis for a tax audit; which is to determine the taxable profits or loss of the taxpayer and, as a result, determine whether the tax calculations remitted to the tax authority tallies with the original records and all pertinent tax legislations.

2.1.2   Self-Assessment Tax

The United States first introduced the self-assessment tax collection method in 1913 (Loo, 2006), followed by Japan in 1947 and Canada in 1971 (Costello, 2006). Compared to the government assessment tax method, the practice has proven to be efficient and cost-effective, where the tax officers were responsible for assessing taxpayers. Many countries, including Nigeria, have to queue into the self-assessment method. The legal framework for the Implementation of self-assessment in Nigeria can link to section 24 (f) of the Nigeria 1979 constitution, which provided that:

> "*It shall be the duty of all citizen to assert his income publicly sincerely to suitable and lawful agencies and pay his tax without delay.*"

Consequently, the self-assessment method was introduced in Nigeria, an effective date from 1992. The technique was initially restricted to the taxpayers' threshold but later extended to the rest in 1998. At first, taxpayers' compliance with the new taxing method was not impressive due to law enforcement by the government and the unwillingness of taxpayers to accept the new practice. As a result, the 2011 regulation on self-assessment was introduced to strengthen the system further and make it more enforceable.

Today, the self-assessment tax collection method has got sufficient legal framework backing its continuous practice in Nigeria with the provisions of the Constitution, Tax Laws and Regulations. The self-assessment tax collection method applies to Companies Income Tax (CIT), Education Tax (EDT), Personal Income Tax (PIT), National Information Technology Development Levy (NITDL), Value Added Tax (VAT), and Petroleum Profit Tax (PPT) (FIRS, 2011).

Returns filed under self-assessment are subjected to two types of audits. First is the Desk Audit or Desk Review. This is a form of basic checks by a tax officer on the returns to verify the correctness of facts and figures that can affect tax position if misrepresented. This is carried out in the tax office, unlike the field tax audit at the field. The second leg of the audit is the Field Audit. The tax authority conducts the field Audit through a designated tax audit team at the taxpayer's premises, where the taxpayer is requested to provide all the documents, records and books of accounts used to make the tax returns.

The Implementation of self-assessment has positively impacted Nigeria's tax administration in several ways. It reduced the person-hour, usually spent on issuing assessment notices and related human errors associated with misplacement of files. It, therefore, reduced the delays in servicing assessment notice. The law provides the taxpayers with the burden of filing tax returns, while the tax authority ensures that the right amount of tax due is paid and at the right time.

2.2   Theoretical Literature

2.2.1   Theory of Reasoned Action (TRA; 1975)

Fishbein and Ajzen propounded the theory of reasoned action in 1975. This theory envisages behavioural intentions; this theory assumes that individuals consciously decide on performing or not performing a particular behaviour. They consider and evaluate various criteria as regards behaviour before actually performing it. The theory suggests that behaviour is determined by behavioural intention; if a person proposes to do a behaviour, the person will likely do it. Attitude toward the person's behaviour is the individual's positive or negative reaction regarding performing a behaviour. It is determined by evaluating one's belief regarding the consequences of performing the behaviour. These people may include supervisors, co-workers, community leaders, family members, friends, and other significant persons.

2.2.3   Theory of Planned Behaviour (TPB; 1980)

The TPB is an expansion of the Fishbein and Ajzen theory of reasoned action. Even though the TRA has been functional in various areas, it has the restriction of assuming when people form an intent to act. They will be at liberty to perform. Practically, environmental restraint will put a limitation on the freedom to act. The theory of planned behaviour (TPB) was proposed to overcome this limitation as an extension of TRA. TPB suggest that a given behaviour is influenced directly by behavioural intents. Which sequentially can be envisaged by the attitude in the direction of the behaviour, subjective norm regarding the conduct and perceived behavioural control. The TRA theory is relevant to this study in explaining the relationship between the taxpayers and the tax authority. The compliance level of the taxpayers is always dependent on the activities of the tax authority. The TRA theory underpins that knowledge of tax audits goes a long way to forecasting the compliance level of taxpayers.

2.3   Review of Empirical literature

Clement and Ayodele (2019) examined tax audit's effect on tax compliance and tax revenue remittance in Ekiti State. It mainly studied the impact of a field audit, back duty audit, desk audit, and registration audit on tax compliance and remittance of tax returns in Ekiti State. The study used a close-ended questionnaire to elicit information from the respondents. The result revealed that field, back duty, desk, and registration audits had a significant positive effect on tax compliance and remittance in Ekiti State, respectively. Onoja & Iwarere (2015) again investigate the impact of tax audits on revenue generation in the Federal Inland Revenue Service using questionnaires as the data source. Tested with ANOVA, the result revealed that tax audits have significant effects on and positively affect revenue generation.

In yet another study, Samuel and Tajudeen (2021) investigated the implications of tax audits and investigations related to taxpayers' compliance in Nigeria. A self-structured questionnaire was used to elicit information from selected senior staff of FIRS. The result revealed that regular tax audits influence tax compliance. Tax audit and investigation had a positive, statistically significant effect on tax compliance. Appah and Ogbonna (2014) carried out a study on Self-Assessment Scheme and Revenue Generation in Nigeria. With a well-structured questionnaire, data were collected through primary sources. The analysis reveals that the self-assessment compliance rate significantly affects revenue generation in Nigeria.

As evident from the above studies-within and outside the shores of Nigeria, there seems to be a positive impact of tax audits on the tax compliance rate, which, with all things being equal, will hurt tax evasion. Nevertheless, there is a lack of validation on the extent tax investigation and audit helped contribute to the revenue generated in Southeast Nigeria?

3.   Research Methods

This study uses both the qualitative and quantitative design as primary and secondary data were used. The secondary data are BI-monthly data gotten from FIRS Web Portal. The quarterly data spanned 2010 to 2021, sourced from the FIRS web portal. The primary data was the structured questionnaire that captured questions that answered the problem identified. The structured questionnaire was close-ended. The response was ranked using the five-point Likert scale, ranging from "Strongly Agree" to "Agree", "Undecided to Disagree", and "Strongly Disagree". For the independent variable, the data is primarily sourced from 21 tax offices in South East of Nigeria, including 15 selected auditing firms. The focus is on the management cadre of the tax offices made up of 196 staff, with 69 tax consultants of the audit firms. This together consists of a population of 265. With the adoption of the Kreijce and Morgan (1970) sampling technique, a sample of 157 was obtained. This study adopted mutually descriptive and inferential statistics in analysing the appropriate data collected for this study. Descriptive statistics consist of frequency counts and percentages, while inferential statistics are in the form of ordered logistic regression.

The Functional Model of the study is as follows:

Tax Revenue Generated (TRG; Dependent Variable) is a function of Tax Audit and Investigation (TAI).

Tax Audit and Investigation (TAI; Independent Variable) is measured with indicators and variables given as Desk Audit   DEKAUD, Field Audit   FDAUD, Back Duty Audit   BAKDUTAUD, Registration Audit REGAUD

Therefore:
TRG = β0+ a1DEKAUD+ a2 FDAUD + a3BAKAUD+ a4 TAXINV +μ... [1]
Specifically,
CIT = β0 + a1DEKAUD + a2 FDAUD + a3BAKDUTAUD + a4 REGAUD +μ...............[2]

CGT =   β0+ a1DEKAUD+ a2 FDAUD + a3BAKDUTAUD + a4 REGAUD +μ...............[3]

VAT = β0+ a1DEKAUD+ a2 FDAUD + a3BAKDUTAUD + a4 REGAUD +μ...............[4]

TTRG = β0+ a1 TRGSE +μ .... [5]

4. Results and discussion

4.1 Unit Root Test

Table I shows the results of the unit root test. The result revealed that all the variables are stationary at first difference. For that reason, the Johansen co-integration condition is satisfied. With this, the study proceeds to run the co-integration analysis. The co-integration analysis examines the long-run relationship among the variables used.

Table1: Unit Root Test (Augmented Dickey-Fuller Test Equation)

S/N	Variables	ADF Stat	Critical Values			Order of Integration
			1%	5%	10%	
1	CIT	-2.052857** PV (0.0467)	-4.018349***	-3.439075**	-3.143887*	1(1)
2	CGT	-2.101009 ** PV (0.0346)	-2.579967***	-1.942896**	-1.615342*	1(1)
3	VAT	-1.753497** PV (0.0255)	-2.579967***	-1.942896**	-1.615342*	1(1)
4	TTRG	-2.065516** PV (0.0377)	-2.579967***	-1.942896**	-1.615342*	1(1)
5	DEKAUD	-12.99825*** PV (0.0000)	-3.473096***	-2.880211***	-2.576805*	1(1)
6	FDAUD	-11.46735***	-3.473672***	-2.880463***	-2.576939*	1(1)

		PV(0.0000)			
7	BAKDUTAUD	-10.91787*** **PV(0.0000)**	-4.019151***	-3.439461***	-3.144113	1(1)
8	REGAUD	-10.29704*** **PV(0.0000)**	-3.473672***	-2.880463***	-2.576939*	1(1)
9	TRGSE	-3.474016 ** **PV (0.0458)**	-4.018349****	-3.439075**	-3.143887*	1(1)

(i) Variables Construe; company income tax (CIT), capital gain tax(CGT), value-added tax (VAT), the total tax generated in Nigeria (TTRG), Desk Audit (DEKAUD), Field Audit (FDAUD), Back Duty Audit (BAKDUTAUD), Registration Audit (REGAUD) and total revenue generated in Southeast (TRGSE),.

(ii) P-values in parenthesis; *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$

4.2   Pearson's Correlation matrix

Table 2 demonstrates Pearson's correlation among the variables. The result revealed that our variables are not highly correlated.

Table 2: Pearson's correlation matrix among the variables

	CIT	CGT	VAT	TTRG	DEKAUD	FDAUD	BAKDUTAUD	REGAUD	TRGSE
CIT	1.000000								
CGT	-0.243808	1.000000							
VAT	-0.463167	0.319857	1.000000						
TTRG	-0.383288	0.515646	0.635163	1.000000					
DEKAUD	0.203109	-0.129707	-0.106310	-0.029168	1.000000				
FDAUD	0.126534	-0.087553	-0.050302	-0.032468	0.431747	1.000000			
BAKDUTAUD	-0.018559	-0.024079	-0.076936	-0.059481	0.173878	0.003609	1.000000		
REGAUD	-0.041033	0.016743	-0.034973	-0.013131	0.298367	0.243639	0.533035	1.000000	
TRGSE	-0.559763	0.503440	0.385213	0.333645	-0.102480	-0.086658	0.145175	0.148147	1.000000

Source: Author's Computation (202

4.3 Descriptive Analysis

Table 3: Demographic Characteristics

S/N	Items	Respondent	Percentage (%)
1.	Gender	-	-
	Female	54	42.5
	Male	73	57.5
Total		127	100
2.	**Educational/Professional Qualification**		
	OND	19	15.0
	HND	35	27.6
	BSc	42	33.1
	Master's Degree	31	24.4
	Total	127	100
	Missing	30	
		157	100
3.	**Years of experience in tax job**		
	0-5	26	20.5
	6-10	40	31.5
	11-20	39	30.7
	20 years and above	22	17.3
	Total	127	
	Missing	30	
		157	100
4.	**Organisation/Profession**		
	Private Organisation	42	
	Public Organisation	85	
	Total	127	100
5.	**Position occupied**		
	Management Cadre	93	73.2
	Tax Consultants	34	26.8
	Total	127	100

Table 3 shows that 54 (42.5 per cent) of the respondents are female, while 73 (57.5 per cent) are male. By implication, there are more male staff than females in the sector. Item 2 in the table shows Educational/Professional Qualification. 19 (15 per cent) are OND holders, 35 (27.6 per cent) are HND

holders, 42 (33.1) are BS.c holders, and 31 (24.4 per cent) are master's degree holders. This indicates that many learned persons are in this sector and can handle tax issues professionally. Item 3 in the table shows the years of staff experience in tax jobs. 26 (20.5 per cent) have 0-5 years of work experience, 40 (31.5 per cent) has 6-10 years of work experience, and 39 (30.7) have 11-20 years of work experience. In comparison, 22 (17.3 per cent) had worked in the establishment for more than 20 years. This implies the selected staff have deep knowledge of tax issues. Item 5 in the table shows the position occupied by the staff used in this study. 93 (73.2 per cent) are Management Cadre, and 34 (26.8 per cent) are Tax Consultants. This implies the respondents are knowledgeable in tax matters and that their responses can be relied upon to conclude.

4.4 Test of co-integration

Table 4: Co-integration Regression (Hypothesis One)

Dependent Variable: CIT
Method: Fully Modified Least Squares (FMOLS)
Included observations: 264 after adjustments
Long-run covariance estimate

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEKAUD	0.056853	0.027521	2.065795	0.0406
FDAUD	0.010017	0.044981	0.222690	0.8241
BAKDUTAUD	0.026536	0.032367	0.819849	0.4136
REGAUD	0.008623	0.034355	0.251013	0.8021
C	13.20564	0.088385	149.4102	0.0000
R-squared	0.647705	Mean dependent var		13.59370
Adjusted R-squared	0.635962	S.D. dependent var		0.150156
S.E. of regression	0.090597	Sum squared resid		1.231180
Long-run variance	0.036269			

The co-integration test above employed the Engle-Granger, one of the appropriate long-run estimators for the single equation model. The result is shown in Table 4. The outcome demonstrates a positive relationship between the dependent variable, tax revenue generated proxy with CIT and the independent variable, tax audit and investigation in the long run. The result of the normalised cointegrating equation indicated:

CIT = 13.21 + 0.06 DEKAUD + 0.01 FDAUD + 0.03 BAKDUTAUD + 0.01 REGAUD

Furthermore, the result showed that a point change in desk audit, field tax audit, back duty tax audit, and registration audit would result in 0.06, 0.01, 0.03 and 1.24 point change in CIT revenue generated in Southeast Nigeria. All the explanatory variables except DEKAUD showed a non-significant impact on CIT revenue generated in Southeast Nigeria in the long run with their respective p-values (0.8241, 0.4136 and 0.8021) higher than the 5 per cent level of significance. Though these variables are not significant, the

positivity is an indication that there was a change in the CIT revenue collected for the period. DEKAUD, on the other hand, significantly impacted CIT revenue collected for the period. DEKAUD, FIDAUD, BAKDUTAUD and REGAUD explain 64 per cent variation in CIT generated. The coefficient value of 64% implies that if there is any disequilibrium in the system, it will take an average speed of 64% for the system to return from the short run to the long run annually. This implies a high speed of adjustment from the short run to the long if there is any disequilibrium in the system.

Table 5: Co-integration Regression (Hypothesis Two)

Dependent Variable: CGT
Method: Fully Modified Least Squares (FMOLS)
Included observations: 264 after adjustments
Long-run covariance estimate

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEKAUD	0.286546	0.146584	0.590418	0.0358
FDAUD	0.407846	0.239986	0.032692	0.0440
BAKDUTAUD	0.136989	0.172584	0.793754	0.0286
REGAUD	0.046561	0.181032	0.257198	0.0374
C	8.482974	0.436952	19.41396	0.0000
R-squared	0.864223	Mean dependent var		8.157705
Adjusted R-squared	0.611890	S.D. dependent var		0.457121
S.E. of regression	0.459831	Sum squared resid		31.92806
Long-run variance	1.033909			

Table 5 shows the result of hypothesis two. The result demonstrates a positive relationship between the dependent variable, tax revenue generated proxy with CGT and the independent variable, tax audit and investigation in the long run. The result of the normalised cointegrating equation is indicated as follows:

CGT = 8.48+ 0.29 DEKAUD + 0.41 FDAUD + 0.14 BAKDUTAUD + 0.05 REGAUD

In addition, a point change in desk audit, field tax audit, back duty audit and registration audit would result in 0.29, 0.41, 0.14 and 0.05 point change in tax revenue generated in Southeast Nigeria. All the explanatory variables showed a significant impact on CGT revenue generated in Southeast Nigeria, with their respective p-values (0.0358, 0.0440, 0.0286 and 0.0374) lesser than the 5 per cent level of significance. DEKAUD, FIDAUD, BAKDUTAUD, and REGAUD explain 86 per cent variation in CIT generated. The coefficient value of 86% implies that if there is any disequilibrium in the system, it will take an average speed of 86% for the system to return from the short run to the long run annually. By implication, there is a high speed of adjustment from the short run to the long if there is any disequilibrium in the system.

Table 6: Co-integration Regression (Hypothesis Three)

Dependent Variable: VAT
Method: Fully Modified Least Squares (FMOLS)
Date: 10/04/21 Time: 13:23
Included observations: 264 after adjustments
Long-run covariance estimate

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DEKAUD	-0.023009	0.065800	-0.349675	0.7271
FDAUD	0.071396	0.107480	0.664273	0.5075
BAKDUTAUD	-0.196543	0.077336	-2.541408	0.0121
REGAUD	-0.179470	0.082297	-2.180747	0.0308
C	9.740896	0.234177	41.59622	0.0000
R-squared	0.759431	Mean dependent var		8.157705
Adjusted R-squared	0.749744	S.D. dependent var		0.457121
S.E. of regression	0.228677	Sum squared resid		7.791716
Long-run variance	0.207056			

Table 6 shows the outcome of hypothesis three. The result demonstrates both positive and negative relationships between the dependent variable, tax revenue generated proxy with VAT and the independent variables, tax audit and investigation. Below is the normalised cointegrating equation:

VAT = 8.48+ (-)0.02 DEKAUD + 0.07 FDAUD + (-)0.19 BAKDUTAUD + (-)0.17 REGAUD

The result, in addition, showed that a point change in desk audit would lead to a negative point change in VAT revenue in the long run. A point change in field tax audit would lead to a point increase in VAT revenue collected in the long run. A point increase would result in a -0.19 and -0.17 point change in VAT revenue generated for back duty tax audit and registration audit. All the explanatory variables except DEKAUD, with a non-significant p-value of 0.7271, significantly impacted VAT revenue generated in Southeast Nigeria, with their respective p-values lesser than the 5 per cent level of significance. All the variables explain a 75 per cent variation in VAT generated. The coefficient value of 75% implies if there is any disequilibrium in the system, it will take an average speed of 75% for the system to return from the short run to the long run annually.

Table 7: Co-integration Regression (Hypothesis Four)

Dependent Variable: TTRG				
Method: Fully Modified Least Squares (FMOLS)				
Date: 10/01/21 Time: 20:42				
Included observations: 264 after adjustments				
Long-run covariance estimate				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
TRGSE	1.363890	0.666876	2.045192	0.0425
C	7.646630	4.749574	1.609961	0.0095
R-squared	0.111329	Mean dependent var		1245.538
Adjusted R-squared	0.105559	S.D. dependent var		141.5849
S.E. of regression	133.9038	Sum squared resid		2761255.
Long-run variance	83943.06			

The result shown in Table 7 is the result of hypothesis four. The result demonstrates positive relationships between the dependent variable, tax revenue generated proxy with TTRG and the independent variable, tax audit and investigation. The normalised cointegrating equation is as follows:
TTRG = 8.48+ 4.51 TRGSE

In addition, a point change in TRGSE would lead to a positive point change in TTRG revenue for the period. The explanatory variable TRGSE significantly impacted TTRG revenue generated in Nigeria with a p-value of 0.0425. TRGSE explains an 11% variation in TTRG. The coefficient value of 11% implies that if there is any disequilibrium in the system, it will take an average speed of 11% for the system to return from the short run to the long run annually. There is, by implication, a high speed of adjustment from the short run to the long if there is any disequilibrium in the system. These findings support the findings of Samuel and Tajudeen (2021), Appah and Ogbonna (2014) and Clement and Ayodele (2019). Their studies established a positive, statistically significant effect of tax audit and investigation on revenue generation. These findings also support the theory of planned behaviour, which stipulates that the compliance level of the taxpayers is always dependent on the activities of the tax authority.

4.5 Conclusion and Policy Recommendations
4.5.1 Conclusion
The study examined the impact of tax audit and investigation in sustaining tax revenue generated under the self-assessment collection in Southeast Nigeria. Based on the study's findings, the researchers concluded that tax audit and investigation under the self-assessment collection enhanced the level of tax revenue generated in Southeast Nigeria. Adequate utilisation of any form of tax audit and investigation would positively impact the income accruing to the government from taxation due to a reduction in tax evasion, avoidance and an increase in voluntary compliance. Tax audits and investigations push the taxpayer to be on their toes. Remarkably, this is true for the taxpayer who is slightly acting following tax laws and who can move into the realm of tax evaders without difficulty. As society pays their tax as and

when due, the communities will be happy as it benefits as the government uses the income to provide essential services. Our conceptual framework in figure 1 clearly explains this relationship.

4.5.2   Policy Recommendations

The study recommends that tax audit and investigation in the form of the desk tax audit, field audit, back duty tax audit, and registration audit be carried out regularly to ensure that the exact revenue collected is what is remitted to the treasury. In addition, the internal control mechanism to test and supervise the staff of the tax audit and investigation should be strengthened by the management to help minimise the level of corruption and enhance the effectiveness of the tax audit and investigation. The tax audit and investigation department should be given autonomy to carry out its responsibility effectively as specified in the Federal Inland Revenue Service Establishment Act 2007. Tax auditors and FIRS staff members should be acquainted with modern tools like Computer Aided Audit Tools (CAATs) to enhance performance and maximise tax revenue generation. All relevant authorities should encourage tax audits and investigations to increase tax revenue for the government to keep up with its obligation to its citizen.

References

2. *Adediran, S.A., Alade, S.O., & Oshode, A.A. (2013). The impact of Tax Audit and investigation on revenue generation in Nigeria, European Journal of Business and   Management, 5(26), 171 – 174.*

3. *Appah, E. & Ogbonna G. N. (2014). Self-Assessment Scheme and Revenue Generation in Nigeria, Developing Country Studies, 4(10), ISSN 2225-0565.*

4. *Brima, I. and Festus, O.E. (2014), "Tax elasticity in Sierra Leone: a time series approach", International Journal of Economics and Financial Issues, Vol. 2 No. 4, pp. 432-447.*

5. *Chude, D.I. and Chude, N.P. (2015), "Impact of company income taxation on the profitability of companies in Nigeria: a case study of Nigeria breweries", European Journal of Accounting, Auditing and Finance Management, Vol. 3 No. 8, pp. 1-11.*

6. *Clement O. O. and Ayodele T. E. (2019). Effects of Tax Audit on Tax Compliance and Remittance of Tax Revenue in Ekiti State, Open Journal of Accounting, 8, 1-17,*

7. *Costello, P. (2004). Background to self-assessment and the focus of the review. Australia Tax Office.*

8. *Ezugwu, C.I. &Akubo, D. (2014). Analysis of the effect of high corporate tax rate on the profitability of the corporate organisation in Nigeria – A Study of some selected corporate organisations, Mediterranean Journal of Social Sciences, 5(20), 310 – 321.*

9. *FIRS (2021). Tax Revenue Statistics: FIRS Tax Year Planner, retrieved from s3.amazonaws.com.pdf, 2021.*

10. *Israel, A. (2016). Sustainable Development in Nigeria: Leveraging the Petroleum Industry, Expert Guild, Primera Africa Legal, Nigeria. Access at www.expertguides.com, 29th September 2021.*

11. *Kircher, E.E. (2008), "Enforced versus voluntary tax compliance: the slippery framework", Journal of Economic Psychology, Vol. 29 No. 2, pp. 210-225.*

12. *Loo, E. C. (2006). Influence of the introduction of self-assessment on the compliance behavior of individual taxpayers in Malaysia, Ph.D Thesis of The University of Sydney.*

13. *Madugba, J. U., Ekwe, M.C. and Kalu, J.M. (2015). Corporate Tax and Revenue Generation: Evidence from Nigeria. Journal of Emerging Trends in Economics and Management Sciences 6(5); 333 – 339.*

14. *Olurankinse, F. & Oladeji, O.E. (2017). Self-Assessment, Electronic-Taxation Payment System and Revenue Generation in Nigeria, International Accounting and Taxation   Research Group, 1(1), 39 – 55.*

15. *Onoja, M.L. and Iwarere, H.T. (2015), "Effects of tax audit on revenue generation: Federal Inland Revenue Service, Abuja experience", Journal of Good Governance and Sustainable Development in Africa, Vol. 2 No. 4, pp. 67-80.*

16. *Samuel A. O. & Tajudeen A. B. (2021). Implications of Tax Audit and Investigation on Taxpayers' Compliance in Nigeria, International Journal of Innovation, Creativity and Change, 15(3).*

17. *Samuel, S.E. and Simon, S. (2011), "The effect of income tax on capital investment decisions of banks in Nigeria", Kogi Journal of Management, Vol. 4 No. 1, pp. 116-128.*