Non–Tax Revenue and Economic Growth in Nigeria

Kypus Munasuonyo Ikaye[*]**, Leyira Christian, Micah**
Department of Accounting, Faculty of Management Sciences, University of Portharcourt, Choba, Rivers State, Nigeria

Abstract: This study seeks to Investigate Non tax Revenue and Economic Growth in Nigeria. In this research, secondary data were obtained from Central Bank of Nigeria bulletin of 2016 and Nigeria stock exchange annual report for a period of 10 years from 2006-2016. Non tax Revenue variables are Fees, Fines & penalty and grant. Hypotheses were tested using regression analysis with e-view to determine whether our hypotheses should be accepted or not. Our findings show that nontax revenue does have significant effect on the economic growth of Nigeria. Based on the findings, it is recommended that clear that deliberate action has to be taken to improve non-revenue collection and mechanism for effective utilization of government resources.
Keywords: Non tax revenue, Economic Growth.

INTRODUCTION

The most challenging task for a government is to augment its untied resources through both tax and non-tax revenue for to finance expenditure both through revenue and capital expenditure. This, in turn, will expedite economic growth through the multiplier effect of the government expenditure and development through the redistributive policy. Though tax revenue is a major component of the own tax revenue of government, however, mobilizing resources through non-tax sources serves the twin purpose of having a rational non-tax structure and generating resources to finance more expenditure.

The importance of non-tax revenue is now being realized by the government in the context of revenue deficits and, the heavy financial requirements for upgrading and modernizing basic infrastructure [1]. Therefore, non-tax revenue is essential to finance the repair, maintenance and operations (MRO) of existing capital assets that creates positive externalities as well revenue for the governments. The expenses on account of MRO of capital assets are booked as revenue expenditure.

However, there is relatively little or no specific economic literature and applied work on non-tax revenue in developed economies with diversified economic structures. This is perhaps not surprising, because, as mentioned above, non-tax revenue typically consists of income from a very heterogeneous mix of sources and, compared to major sources of taxation, most non-tax revenue items have limited role as a tool for governments to influence macroeconomic conditions. Research on non-tax revenue in developing or resource-rich economies has commonly focused on disaggregated components such as foreign aid or revenue from oil, including on the interaction between such revenues and democratization and economic development. Various studies focus on the relationship between revenue from natural resources and degree of democracy in the resource rich countries. For example, Morrison [2] makes the argument that non-tax revenue from foreign aid and oil resources contribute to regime stability in both developed and developing countries.

Statement of the Problem

There is a general lack of consensus among scholars on the contribution of non- tax revenue to the economic growth of nations. For instance, whereas Ariyo [3] in his study on productivity of the Nigerian tax system documented a satisfactory level of productivity of the tax system before the oil boom, Festus and Samuel [4] established that the role of non-tax revenue in promoting economic activities and growth is not felt in Nigeria. The two studies reflect that the oil boom has not improved the economic state of the country since before the boom, there was a satisfactory level and after the boom, the growth of economic activities deteriorated. The emergence of oil as a major tax revenue is one of the government devises in solving the economic problems of the country and to enhance government expenditure which is expected to be beneficial to the citizens of such country through the provision of social and economic infrastructures [5].

In Nigeria, despite the non-tax revenue and expenditure reported year in year out by the government, the physical state of the nation in terms of infrastructure and social amenities is backward. This is evident in the lack of electricity supply, portable drinking water, basic health care delivery, bad roads, just to mention but a few.

Broadly, the aim of this study is to examine the relationship between non-tax revenue and the Nigerian economic growth.

THEORETIC REVIEW
Economic Growth theory

In examining the work of the classical economists we find also that problems of economic growth were analysed through the application of general economic principles, viewing the economic system as a whole, rather than in terms of a separate theory of economic growth as such. These principles were such as to recognize basic patterns of interdependence in the economic system and interrelatedness of the phenomena of production, exchange, distribution, and accumulation. In sum, what we find in classical economic analysis is a necessary interconnection between the analyses of value,

As a result of their work in economic analysis the classical economists were able to provide an account of the broad forces that influence economic growth and of the mechanisms underlying the growth process. An important achievement was their recognition that the accumulation and productive investment of a part of the social product is the main driving force behind economic growth and that, under capitalism, this takes the form mainly of the reinvestment of profits. Armed with this recognition, their critique of feudal society was based on the observation among others, that a large part of the social product was not so invested but was consumed unproductively.

Socio-Political theory

Bhartia [6] posits that social and political objectives should be the major factors in selecting non-taxes. The theory advocates that a non-tax system should not be designed to serve interest, but should be used to cure the ills of the society as a whole. Consequently, Lawal [7] added that there are many ways in which government uses non-taxation as an instrument of economic policy to achieve the socio-political objectives.

Revenue Geneneration

Revenue is defined as all amounts of money received by a government from external sources for example those originating from "outside the government" net of refunds and other correcting transactions, proceeds from issuance of debt, the sale of investments, agency or private trust transactions, and intra-governmental transfers [8]. Financial resources of government constitute the bulk of its revenue and this relate to monies mobilized or generated in the economy [9].

The working definition of this study is in line with Asher [10], Soyode and Kajola [11] assertions that options are available to governments for raising fund for bidding resources away from the other sectors of the economy and from other claimants to undertake their activities. Thus, revenue sources are not only limited to oil and non-oil sources but other means available to government in raising fund to financing their activities. Hence, the study also captured public debt.

Public revenue consists of taxes, revenue from administrative activities like fines, fees, gifts and grants. Public revenue can be classified into two types including: tax and non-tax revenue [12]. Taxes are the first and foremost sources of public revenue. Taxes are compulsory payments to government without expecting direct benefit or return by the tax payer. The government collects tax revenue by way of direct & indirect taxes. Direct taxes includes; Corporate tax; personal income tax capital gain tax and wealth tax. Indirect taxes include custom duty, central excise duty, Value Added Tax (VAT) and service tax [13]. Non-tax revenue refers to the revenue obtained by the government from sources other than tax. These include fees, fines and penalties, surplus from public enterprises, special assessment of betterment levy, grants and gifts and deficit financing.

However, according to Ihendinihu, Ebieri and Amaps Ibanichuka [14], two main sources of federal government revenue exist namely; oil and non-oil revenue. Oil revenue is the most important source of revenue to the federal account. Oil revenue are revenue from crude oil and gas exports, receipts from petroleum profits tax and royalties and, revenue from domestic crude oil sales while non oil revenue: This is the second category of revenue to the federal account. This includes revenue that are not derived from or associated with oil. They include; companies income tax (CIT), Custom and Excise Duties, (CED), Valued Added Tax, Education Tax, Personal Income Tax (PIT), Levies, public debt, grants, aids amongst others.

Public debts are domestic and foreign borrowing including loans from domestic financial institution and multilateral institutions and foreign grants. According to Oyejide [15], debt is the resource or money in use in an organization, which is not contributed by its owner and does not in any other way belong to them. Debt can also be referred to as liability represented by a financial instrument or other formal equivalents. When a government borrows, the debt is a public debt. Public debts can be either internal or external.

Domestic debts are debts instrument issues by the federal government and denominated in local currency Onyeiwu [16]. Nigeria's domestic borrowing (debt) is aimed at escaping the dangers associated with external borrowings occasioned by rising government expenditures vis-à-vis falling government revenues, supplement the internal savings for productive activities through infrastructural development as well as management of other macroeconomic conditions of the country [17-19]. Arnone *et al.,* [20] defines external debt as that portion of a country's debt that is acquired from foreign sources such as foreign corporations, government or financial institutions.

Non-tax Revenues
Fees
Fees are another important source of revenue for the government. A fee is charged by public authorities for rendering a service to the citizens. Unlike tax, there is no compulsion involved in case of fees. The government provides certain services and charges certain fees for them. For example, fees are charged for issuing of passports, driving licenses, etc.

Revenue from licenses for regulated activity cover a wide array of sectors and include business and shop licenses, construction and land use permits, examination and inspection fees, and so on. In Singapore, auction revenue from the sale of vehicle purchase permits (Certificates of Entitlement) are a major source of government revenue. However, this source of revenue is currently not anywhere near as important in Indian states. Three types of fees and charges are reported as a part of tax revenue in state budget accounting in India. First, registration fees for documents and related fees such as for title searches. Second, judicial stamp "duties" including revenue from sale of judicial stamps are accounted for as a part of stamp duties. Third, there are transport sector related fees for licenses, permits and vehicle registration as also some portion of road tolls.

Fees are itemized payments for court activities, supervision, or incarceration charged to defendants determined guilty of infractions, misdemeanors or felonies. Fee collections are intended to support operational costs in the criminal justice system and may also be used to compensate victims for losses. Fees may also have a punitive and deterrent purpose, but are not designed to cater to specific offense categories.

The use of fees has grown for all sentencing groups; they remain more common in cases of misdemeanors, infractions, and other relatively less serious crimes than in cases of felonies. Even among felony defendants, fines and fees are more common for individuals convicted to probation or jail than prison, because fines may be used as an alternative to incarceration. At all levels, fines and fees are more associated with less serious crimes includes a large proportion of poor defendants. Example of fees**:** Food and Drug Administration prescription drug user fees, Postal Service charges for stamps, Medicare premiums and other fees

Fines / Penalties
Since by breaking laws citizens reveal that their private cost of doing so is below the cost to society, fines for breaking the law are similar to Pigouvian taxes levied on goods with negative external effects. The amount of the "tax" in the case of fines is the ex ante, expected value of the fine, in the event that the law breaker is caught and penalized. In designing fines, pure externality considerations must be tempered to take account of the incentive effect of fines on behavior and also the principle of natural justice which asserts that "the penalty should not exceed the crime". This is the subject of much ongoing research.

A wide ranging discussion of penalty design which is yet to be surpassed in terms of scope is in Oldman [21]. As Bird (forthcoming) puts it: "Experience suggests that penalties should increase with the potential revenue loss due to the tax offence; the difficulty and cost of detecting the offence; the effect of the offence on other taxpayers; the offender's state of mind (a higher penalty should apply if the offence is deliberate and pre-planned).

From a revenue standpoint, collection from well designed fines and penalties should increase with an increase in detected offences but decrease to the extent that non-compliance is deterred. So a monotonic relation between penalty revenue and compliance cannot be expected. Therefore, in evaluating penalties, both their design, in accordance with principles outlined, and implementation need to be examined. In the case of penalties for non-payment of monetary dues,

efficient penalties will translate into greater collection of these dues (but not necessarily penalties). Unfortunately, systematic empirical studies of penalty design and implementation are hard to come by for any country.

Fines or penalties are imposed as a form of punishment for breach of law or non fulfillment or certain conditions or for failure to observe some regulations. Like taxes, fines are compulsory payments without quid pro quo. But while taxes are generally imposed to collect revenue, Fines are imposed as a form of punishment or to prevent people from breaking the law. They are not expected to be a major source of revenue to the government.

A fine is money that a court of law or other authority decides has to be paid as punishment for a crime or other offence. The amount of a fine can be determined case by case, but it is often announced in advance.

The most usual use of the term is for financial punishments for the commission of crimes, especially minor crimes, or as the settlement of a claim. A synonym, typically used in civil law actions, is mulct.

One common example of a fine is money paid for violations of traffic laws. Currently in English common law, relatively small fines are used either in place of or alongside community service orders for low-level criminal offences. Larger fines are also given independently or alongside shorter prison sentences when the judge or magistrate considers a considerable amount of retribution is necessary, but there is unlikely to be significant danger to the public. For instance, fraud is often punished by very large fines since fraudsters are typically banned from the position or profession they abused to commit their crimes.

Some fines are small, such as for loitering. In some areas of the United States (for example California, New York, Texas, and Washington D.C.), fines for petty crimes, such as criminal mischief (shouting in public places, projecting an object at a police car).

Fines attempt to deter crime or punish offenders. Fines do not just impose large financial and human costs on poor offenders — they are also inefficient ways to raise revenue because offenders tend to have lower levels of income.

Grants

Grants are non compulsory transfers received by government units from other government units or international organizations. Grants may be classified as capital or current and can be received in cash or in kind. Gifts are significant source of revenue during war and emergency.

A grant from one government to another is an important source of revenue in the modern days. The government at the Centre provides grants to State governments and the State governments provide grants to the local government to carry out their functions.

Grants from foreign countries are known as Foreign Aid. Developing countries receive military aid, food aid, technological aid, etc. from developed countries. Aid is used to cover all financial transactions made or guaranteed by one government to another. Indeed, foreign aid has become a focus and locus in the Third World. It has assumed the status of foreign policy instrument by developed democracies to strengthen their relationship with, and consequently spread their influence on, the Third World. Aid has been defined by Ajayi [22] as "a form of assistance by a government or financial institutions to other needy countries, which could be in cash or kind". Establishment of an aid system was one of the principles of the Breton Woods system in 1914. The system believes that there should be a free capital market, which allows an unrestricted inflow of foreign aid.

US Foreign Aid to Nigeria includes

2010-2015 Nigeria received $3 billion grant from US Govt, Military Assistance, Anti-Terrorism, Defence and Security, Global HIV/AIDS Initiative, Global Health and Child Survival, Development Assistance etc January, 2016 US donated 24 Mine-Resistant and Armor-Protected (MRAP) vehicles valued at $11m.

Japan Foreign Aid to Nigeria includes

From 1998 to date Japan Govt. has implemented over 148 projects in aids in Nigeria. Supporting basic education-Japan International Cooperation Agency (JICA). 2013 317 Classrooms and 308 toilet US$14.8 million accommodate 12,680 pupils in Kano state, Build 325 classrooms in Oyo, State $8.5m. In December, 2015 Japan has built bridge across River Usman in Abuja- 50,000 hectares were accessible & cultivated out of the 200,000 but now all are accessible.

World Bank Foreign Aid to Nigeria
Health agriculture and water supply. 2001-2010 US$ 96.28 million to fight HIV infections. 2009-2017 US$ 230.00 million to fight HIV infections.

December, 2015 World Bank has earmarked $500 million grant for the revival of irrigation farming in Northern Nigeria.

2015 $200 million to finance, new generations of business-oriented agro-preneurs and approved a credit of 250 million US dollars to help the Nigerian Government continue its efforts to increase access to water supply services among the rural people

Empirical Review
According to Anyanwu and Oaikhenan [23] stated that economic growth, simply defined, refers to the increase, over time, of a country's or an economic capacity to produce those goods and services needed to improve the well-being of the citizens in increasing numbers and diversity. The International Monetary Fund [24] and CBN [25] agree that economic growth is the increase in the amount of goods and services produced in an economy over time. It is conventionally measured as the percent rate of increase in Real Gross Domestic Product (RGDP). Growth is usually calculated in real terms, that is, inflation- adjusted terms, in order to net out the effect of inflation on the price of the goods and services produced. The growth of the real Gross Domestic Product, RGDP, between 2004 and 2008 was driven mainly by the non-oil sector as reflected in the non-oil GDP and that the Industrial output however fell by 2.2 percent due mainly to the poor performance of the oil sector CBN [26]. The major theories on economic growth are hinged on the growth being a function of the productivity of factors of production as their basic theme. Adam Smith [27] states that economic growth depends on the amount of factors of production viz; land, labour and capital. He argued that economic growth (output) depends on the amount of these factors of production which are the inputs that are determined by the population growth, increase in investment and land, and total growth in labour productivity. While Harrod-Domar model stated that rate of growth of GDP is equal to Savings ratio/Capital- Output ratio, Kaldor model of distribution noted that the process of growth is a function of savings-income ratio. Other models like the Pasinetti model of profit and growth, the Meade's Neo-classical model, the Solow model of long run growth all used the factors of production as their basic theme.

A country's non-tax revenue is also a major determinant of other macroeconomic indexes. Specifically, for both developed and developing economies, there exists a relationship between non-tax revenue and the level of economic growth and development. Indeed, it has been argued that the level of economic growth has a very strong impact on a country's non- tax revenue and non-tax revenue objectives vary with the stages of economic growth [28, 29].

According to Olopade and Olopade [30] Growth means an increase in economic activities. Kuznets [31] defined a country''s economic growth as a long-term rise in capacity to supply increasingly diverse economic goods to its population, this growth capacity is based on advancing technology and the institutional and ideological adjustment that it demands.

Economic growth represents the expansion of a country's potential GDP or output. Rostow Musgrave model [32] carried out a research on growth of public expenditure where they focused mainly on the utilization of non-tax as first of the major revenue source, concluded that, at the early stages of economic development, the rate of growth of public expenditure will be very high because government provides the basic infrastructural facilities (social overheads) and most of these projects are capital intensive, therefore, the spending of the government will increase steadily. The investment in education, health, roads, electricity, water supply are necessities that can launch the economy from the practitioner stage to the take off stage of economic development, making government to spend an increasing amount with time in order to develop an egalitarian society. Development in human society is a one-sided process; this in turn remains the goals of every society at all times. The term development''recently meant growth measured by GDP or rise in per capital income. Yet development is not growth. Perhaps it could be growth coupled with social justice [33]. Development implies changes that lead to improvement or progress; it is believed that an economy that raises its per capita level of real income over time without transforming its social and economic structure is unlikely to be perceived as developing.

Non-tax is aimed to raise revenue to meet government expenditure and to redistribute wealth and manage the economy [34, 35, 6].

Asit R & Suresh K [36] studied Impact of Non –Tax Revenue on Revenue Expenditure in Sub National Public Finance in Economic Sector. The study was limited only to economic sector as it generates less externality as compared

to social and general services sector. The study examined the effect of per capita non-tax revenue on the per capita revenue expenditure in economic service sector in case of 15 NSC sub- national governments of India for the period 2010-11 to 2014-15. The result reveals that the per capita non-tax revenue has favourable effect on per capita revenue expenditure of the sub- national governments. However, the estimated coefficient is inelastic which implies the collection efficiency of revenue sector needs to be further upgraded. As regards to policy implication, government should raise the non-tax revenue through the marginal pricing provision of goods to increase users' coverage.

Egwaikhide [37] analyzed the structural shift of government revenue in Nigeria from 1960-1982 linked direct government revenue to the level of economic development using growth in GDP as a proxy for economic growth. He used two sets of regression equation by breaking sample period into two, 1961-1971, and 1972-1982. First regression analysis indicated that a positive relationship exist between the variables. The second regression result indicates also rose from 81 % to 82%. He concluded that result of the regression analysis indicates that external fund has been the single most important sources of government revenue. The study also found that economic development has a significant impact on direct government revenue. Contrary to Egwaikhide [37], Omoruyi [38] carried out a similar study for about the same time from 1960-1979 and breaking the sample period into two and adopting the same measures. He found out that the result differs from Egwaikhide [37] where the coefficient of elasticity obtained by Omoruyi [38] for the first sample period 1960 – 1969 was 1.09 while that of Egwaikhide was 0.08 for the period of 1961 – 1971. The result premised on assumption of absence of any other significant change in the marginal values of direct tax in the period 1960-1971. Again the elasticity of coefficient obtained by Omoruyi 1970-1974 stood at 1.64 while that of Egwaikhide was 0.15. At this point one can conclude that the inference cannot be actually drawn between the two conflicting results because of certain statistical parameter use to facilitate observation.

Nsebot [39] studied the effects of revenue fluctuation on economic growth in Nigeria from 1970- 1999 using multiple regression model of OLS and found that total federally collected revenue has a significant impacts on economic growth and the standard deviation of total federally collected yields a positive influence in economic growth as against the a priori expectation. The result further indicates that tax base could be change to raise more revenue without altering the rate since the coefficient of tax to revenue is elastic.

Oechslin [40] examines Government Revenues and Economic Growth in Weakly Institutionalized States. The findings reveals that even well-funded governments often fail to provide crucial public goods such as an adequate infrastructure or reliable law enforcement. We argue that this failure is — in part — the result of a political instability effect: More resources in the hands of a self-interested government fuel power struggles among competing elites — and decrease the incumbent regime's time horizon in office. But with a shorter time horizon, it is less attractive to finance growth-promoting institutions whose returns only accrue in the future. The model further predicts the instability effect to be stronger in places with low levels of human or physical capital or in remote countries where technology adoption is more expensive.

Illyas and Siddiqi [12] studied the impact of revenue gap on economic growth using a case study of Pakistan over the period of 1980-2008. The under investigating variables had mix order of integration. The results reveal that revenue gap is significant and negatively related with economic growth. The econometric results suggest that if the gap between targeted revenue and actual collected revenue is high, it affects economic growth negatively and significantly (in case of Pakistan, most of the times collected revenue is less than targeted revenue). This gap can be reduced by doing away with exemptions and special treatments. The real increase in revenue can take place effectively only when the collective benefits of all stakeholders are upheld fairly and equitably. This, in turn, with greater public spending in areas of both development and non-development, will bring about a more equitable distribution of income and allocation of this enlarged pie. It can generate greater macroeconomic stability and balance. More sustained economic development would be possible by the availability of enhanced and, hitherto, untapped sources of public revenue. This will help the economy achieve greater self-reliance and avoid large public debts to minimize budget deficits. Without imposing high tariff and tax rates, government tax revenue collection can be increased by just broadening the tax network, setting the right priorities and by tightening and improving the tax administration in the Pakistan.

Medee and Nenbee [41] carried an econometric analysis of the impact of fiscal policy variables on Nigeria's economic growth (1970-2009) using Vector Autoregression and Error correction mechanism techniques and claimed that tax revenue have effects on the gross domestic product both at the short and long run, meaning that tax revenue positively impact on the economic growth in Nigeria.

Gacanja [42] did an empirical case study of Kenya on tax revenue and economic growth. According to Gacanja, the relationship between economic growth and tax revenues is a debate that has existed for a long time in the living history. He adopt classical linear regression model based on the OLS estimation method, co- integration test and granger

causality test on all the variables. The results of the study revealed a positive relationship between economic growth and tax revenues. All the tax variables; income tax, import duties, excise duties and sales tax/VAT showed a positive effect on GDP with income tax posing the highest effect followed by sale tax/VA T, then excise duties and finally import duties showing the least effect. The co-integration revealed that there is at most one co integrating equation while the Granger Causality test indicated a bi-directional relationship between economic growth and excise duties; a unidirectional relationship between income tax and economic growth, and economic growth and sales tax VAT; however, there existed no causation between economic growth and import duties.

Worlu and Nkoro [43], examines the impact of tax revenue on the economic growth of Nigeria covering the period of 1980 to 2007 using secondary data from Central Bank of Nigeria, Federal Inland Revenue Service. The data collected were analysed using the three stage least square estimation technique. The results show that tax revenue stimulates economic growth through infrastructural development. That is the channels through which tax revenue impacts on economic growth in Nigeria.

Okafor [44] used multiple correlation and regression methods to evaluate the relationship between tax revenue generation and economic development of Nigeria (1981-2007) and concluded that there exists a strong significant relationship between tax revenue and Gross Domestic Product (GDP).
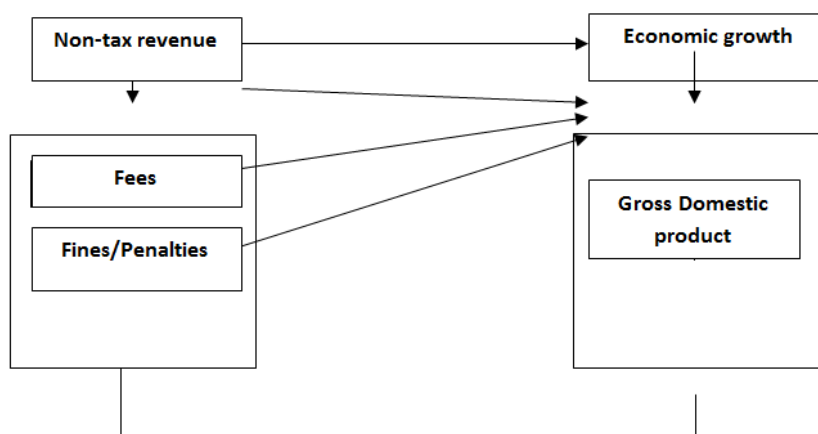

Fig-1: Operational/Conceptual Framework of Non-Tax Revenue and Economic Growth
Source: Operationalised by the Researchers, (2017)

The figure above is a framework indicating the relationship between non-tax revenue and economic growth. Non-tax revenue is the predictor variable while economic growth is the criterion variable. The dimensions of the predictor variable of non-tax revenue adopted in this study are: Fees, Fines/Penalties and grant. On the other hand, while the measures of the criterion variable (Economic growth) adopted for this study is based on the earlier study of Adams [45] that includes: Gross Domestic product.

RESEARCH DESIGN
The researcher adopted the quasi- experimental design for the study since the various elements of the design are not under the control of the researcher. The population of this study includes federal Parastatals in Nigeria. The data for non-revenue covered a period of ten years (10 years) i.e. 2006- 2016.

Data for the study were derived mainly from the secondary sources which includes; financial statement of the selected federal parastatals and Nigeria stock exchange (NSE) annual report, Nigerian Capital Market Bulletin, Central Bank of Nigeria, and Federal Inland Revenue Service (FIRS), research and statistics publication and economic report of various issues; textbooks; articles, journals and the internet. This data will be estimated using E-views 7.5.

Operational measures of the Variables
The dependent variable which is presented as economic growth in this study had been measured operationally in previous studies as GDP.

The independent variable which is presented in concept as non-tax revenue is fees, fines, penalties and grant.

Model Specification

From the foregoing, the multiple equation models to be estimated can be stated as follows:

GDP   =   f (FE, FP, GR)……………………………………….(1)

Where,

FE = Fees
FP = Fines & Penalties
GDP = Gross Domestic Product

The above equation is not sufficient in specification due to the absence of the Constant Parameter and error term. Therefore, we introduce the Constant Parameter and error terms as follows;

$GDP = \beta_o + \beta_1 FE + \beta_2 FP + \beta_3 GR + e_i$……………………….........(2)
On apriority $a_1 > 0$ $a_2 > 0$

Where,

FE   =Fees
FP   = Fines or Penalties
GR   = Grants
GDP   = Gross Domestic Product
β_o = Constant Parameter
β_1, β_2, β_3 = Estimation parameters
μ   = Error terms

The above equation (2) is also tested in its logarithmic form using the Cobb-Douglas logarithmic transformation procedure and simple mathematical manipulations; we obtain equation (3) as stated below:

$Log (GDP) = b_0 + b_1 LogFE + b_2 LogFP + b_3 LogGR + \mu$………......(3)
On apriori $a_1 > 0$ $a_2 < 0$ $\alpha_3 < 0$

Where,

Log   = Logarithmic form
β_o = Constant Parameter
β_1, β_2, β_3 = Estimation parameters
μ   = Error terms

RESULTS AND DISCUSSION

Table-4.1: Result Of Stationarity (Unit Root) Test

Variables	ADF-statistics	Critical values	Order of integration
GDP	-7.719135 (0.0000)	1%= -3.699871 5%= -2.976263 10%= -2.627420	First difference
FE	-5.349843 (0.0000)	1%= -3.69987 5%= -2.976263 10%= -2.627420	First difference
FP	-4.758119 (0.0007)	1%= -3.689194 5%= -2.971853 10%= -2.625121	First difference
GR	-5.086221 (0.0003)	1%= -3.689194 5%= -2.971853 10%= -2.625121	First difference

Source: E-view 7.5 output file.

In order to investigate the order of integration among the variables such as GDP, FE, FP and GR the study has used the Augmented Dickey Fuller (ADF). As stated in the methodology, the tools of unit root tests (ADF) is tested for all the variables by taking null hypothesis as presence of unit root (i.e. Presence of non-stationary) against the alternative

Hypothesis series is stationary. If the absolute computed value exceeds the absolute critical value, then we reject the null hypothesis and conclude that series is stationary and vice -versa. It is clear from the Table above that the null hypothesis of no unit roots for all the time series are rejected at their first differences since the ADF test statistic values is less than the critical values at one percent levels of significances. Thus, these variables are stationary and integrated of same order, i.e., I (1). Thus it is clear that all the variables have unit root in their level form but at first difference the variables became stationary. Thus, the model follows integrating process.

Regression and Specification Tests Results
After running the Augmented Dickey fuller test to determine the stationary of the data presented above, a new model is hereby stated following the stationary results. This is presented as follows:

$$DGDP = \alpha + \beta_1 D(FE)t + \beta_2 D(FP)t + \beta_3 D(GR)t + ECM$$

Interpreted as thus:

D (GDP)= Gross Domestic Product is captured at 1st difference

D (FE) =Fees at 1st difference at level
D (FP) = Fines/Penalties at 1st difference

D (GR) =Grant at 1st difference.
ECM=Residual result after running the residual test.

Co-integration Test
Since all the variables are not stationary at level but at first difference it is quite possible that there is a linear combination of integrated variables that is stationary; such variables are said to be co integrated. To understand the co integrating relationship across these variables the study uses Johansen [46] Co integration Test. The Akaike information criterion (AIC), Schwarz information criterion (SBC), Final prediction error (FPE), Hannan-Quinn information criterion (HQ) and the likelihood ratio (LR) test collectively suggest an optimal lag length of one and the cointegration results are provided in the table below:

Table-4.2: Unrestricted Co integration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigen value	Statistic	Critical Value	Prob.**
None *	0.748834	90.14281	69.81889	0.0005
At most 1 *	0.652351	52.83850	47.85613	0.0158
At most 2	0.474712	24.31136	29.79707	0.1876
At most 3	0.151427	6.928519	15.49471	0.5860
At most 4	0.088271	2.495146	3.841466	0.1142
Trace test indicates 2 co integrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis [47] p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.748834	37.30430	33.87687	0.0187
At most 1 *	0.652351	28.52715	27.58434	0.0378
At most 2	0.474712	17.38284	21.13162	0.1547
At most 3	0.151427	4.433372	14.26460	0.8110
At most 4	0.088271	2.495146	3.841466	0.1142
Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis [47] p-values				

Both the trace statistics and max- eigen statistics rejected the null hypothesis of no cointegration at the 0.05 level (90.14281 > 69.81889 and 37.30430 > 33.87687). But the null hypothesis of three cointegration among the variables is not rejected at the 0.05 level   (24.31136 < 29.79707 and 17.38284 < 21.13162), (6.928519 < 15.49471 and

4.433372 < 14.26460), (2.495146 < 3.841466 and 2.495146 < 3.841466) by both the trace statistics and max-eigen statistics respectively. Hence, the johansen methodology concludes that there exist one cointegrating relationship among GDP, FE, FP and GR. So, estimation of VECM model is required in this context.

Estimated Long Run Relationship Using VECM
  The presence of co integration between variables suggests a long run relationship among the variables under consideration. The long run relationship between GDP, FE, FP and GR for one co integrating vector for Nigeria in the period 1981 to 2010 is shown in the Table below. For better understanding of the relationship between GDP and FE, FP and GR, the study has estimated the VEC model for the period of 2006 to 2016 in special consideration to each of the independent variables and their impact on the dependent variable separately. The justification for this is to examine whether each of the independent variable will have more influence on GDP than considering the pooled data and its impact on GDP. When the variables are in logarithms and one co integrating vector is estimated, the coefficients can be interpreted as long run elasticity.

Table-4.3: Vector Error Correction Results

VARIABLES	STD ERROR	T-STATISTICS	P-VALUE
FE	4.07586	0.56572	2.310364*
FP	11.7847	1.39171	16.39859*
GR	0.37886	0.36809	0.130677*
CUMMULATIVE RESULT			
Model	R-Square	Adjusted R-square	Std error of the Estimates	F statistics
1	0.758934	0.550157	4.287326	3.6570234

Source: E-VIEW 7.5

  During the long run period 2006 to 2016, the T statistic for fees *0.56572*, with standard error of *4.07586*, while the p value is 2.310364, this implies that every one percent increase in Fees is likely to increase gross domestic product by 2.310364 percent and this estimate is significant at 1% level. Thus, it shows there is positive and significant relationship between Fees and gross domestic product. In Nigeria, high Fees is instrumental to the growth of the economy, that is, the Nigerian government should ensure that companies dealing with should ensure to collect fees regularly, as our result indicates that it has positive influence on the economy. As a result of this, we will reject our null hypothesis which stated that fees have no significant impact on gross domestic product. The result agrees with the outcome recorded by Ogbona.

  The Fines/Penalties within a long run period of 2006 to 2016 shows a positive significant relationship with gross domestic product, as the t statistic value is 1.39171 with a standard error of 11.7847, while the p value is 16.39859, this implies that for every one percent increase in Fines/Penalties the gross domestic product will increase by 16.39859 percent. Our result signifies that income earned by the government from source other than taxes are contributing positively to the growth of the economy. This may be as a result of the effectiveness of the bodies in charge of the collection of non- taxes at both state and federal level, that is, the State Internal Revenue Board and the Federal Inland Revenue Service. This was also evident in the study of Ola [48] and Festus and Samuel 2007 where each of the study shows that fines/penalties has a positive impact on Nigeria's GDP. As a result of this, we will reject the hypothesis which stated that fines/penalties have no impact on gross domestic product.

  The Grant within a long run period of 2006 to 2016 shows a t statistic value of 0.36809 with standard error of 0.37867 and p value of 0.130677. This implies that for every one percent increase in Grant, gross domestic product will increase by 0.130677 percent; this signifies that there is a positive significant relationship between Grant and gross domestic product. This will make us to reject the null hypothesis which stated that Grant have no significant impact on gross domestic product as shown in Adegbie [49].

  The summary of the overall results of non- tax revenue is shown in table 4.3.3. It shows that non- tax revenue has made a significant impact on the economic growth of Nigeria in the period under study. The coefficient of determination reveals a value of 0.738. This implies that non-tax revenue has explained up to 33% of the variation in economic growth of Nigeria and the remaining 67% is covered by other factors that are beyond the scope of this study.

  This signifies the fitness of the model, thus, the model is fit and the explanatory variables are well selected and utilized. This is confirmed by the value of adjusted R square which even after the adjustment is still strong and positive at 53%. The f statistics of 3.66 is a proof for the fitness of the model, and it is significant at 1%.

Other Robustness Test Results
The table below presents a summary of further tests to buttress the reliability of the model:

Nature of Test	Chi squre	Probability of Chisquare	Comment
VEC Heteroskedasticity Test	336.8224	0.3860	Not Significant at 5%. Shows absence 0f Heteroskedasticity.

Source: Extracted from Eviews 7.5.0 Results

Heteroskedasticity test was carried out to test whether constant variance exists. This was done using VEC Heteroskedasticity Test. This tests the null hypothesis that constant variance exists. From the result, at 5% level, the chi-square is 336.8224 while probability is 0.3860 indicating that the p-value is not significant. Since the result shows that there is no presence of heteroskedasticity, the study fails to reject the null hypothesis. We hence uphold that our residuals are indeed homoscedastic.

DISCUSSION OF FINDINGS
The research work focuses on the examination of Non-Tax revenue and economic growth in Nigeria. It was stated that non- tax revenue plays a crucial role in the economy by promoting economic activity and making funds available in the government purse that can be used to adequately execute projects to the benefit of the society. Despite the income realized via non-tax revenue in the economy, it was opined by Olashore [50] that the economy still needs radical reform as the impact of non-tax revenue is not properly felt, hence, the economy is still in a state of slumber.

Non-Tax revenue was said to be a veritable source of government revenue, it is as certain as death. The Null hypothesis which states that non-tax does not have any significant impact on the growth of the Nigerian economy is hereby rejected. It can therefore be said that there is a strong positive relationship between the contribution of revenue from non-taxes and GDP as shown in the result presented where an R^2 73% and adjusted R^2 of 53% was reported. This signifies that non-tax revenue has a very high impact on the economic growth of Nigeria as a source of revenue available to government for the purpose of Growth and development. The finding agrees with the findings of Hall [51], Brian [52] and Adegbie and Fakile [49] and contradicts the evidence documented by Bonu and Pedro [53]. This implies that non-taxes contribute largely to Nigeria's GDP as a developing nation unlike in Botswana where non-tax revenue over the nation's GDP is not impressive.

Non-Tax revenue provides a powerful set of policy tools to the authorities and should be effectively used for remedying economic and social ills of the society such as income inequalities, regional disparities, unemployment, and cyclical fluctuations and so on.

For a Mono-economy like Nigeria with heavy dependence on oil revenue, one can say that non-taxes generated from oil revenue if captured with other non-taxes as captured in this study will have a significant impact to the on the national income. The findings of Adereti [5] and Olaoye [14] on Grant also supports the fact that because of its indirect form, it is impossible to evade or avoid the payment of fees a practice most non-tax payers are fond of doing in Nigeria. This will indeed contribute to the positive impact on non- taxes have on the economy of Nigeria

CONCLUSION
The findings of this study contribute towards a better understanding of non-tax revenue and economic growth in Nigeria. GDP and three other variables that represent fees, fines/penalties and Grant were developed to test which factors best describes economic growth in Nigeria.

The result shows that Fees, fines/penalties and Grant are significant variables in explaining the economic growth in Nigeria. The three independent variables show a positive relationship with economic growth. The implication of our findings is pointing majorly at policy makers, especially the Federal Board of Inland Revenue as all of our variables shows a positively significant relationship with economic growth, meaning that there should be no area in non-tax collection that should be taken lightly as they have all proven to be a major variable in connection to the growth of the economy. Also, for researchers, the study will re-introduce them to a different direction of ways in which non-tax revenue can contribute to the economic growth in Nigeria and add to the existing literatures on this subject matter and also ensure that the regulatory body implements policies that will reduce the loop holes in non-tax system.

One of the main purposes of non-tax revenue is to raise revenue that the government can use to provide adequate amenities and infrastructure for its citizens as well as enhance growth and development but the case seems to be different in Nigeria as the physical evidences does not show that funds generated from non-tax revenue are used for this purpose.

Our analysis has thrown some light on the impact of non-tax revenue on Nigeria's economy. It is glaring that the Nigerian non-tax revenue generated has a significant impact on the economy in general.

REFERENCES
1. Mohanty G. Lattice path counting and applications. Academic Press; 2014 Jul 10.
2. Morrison FJ. Parenting and academic development. Merrill-Palmer Quarterly (1982-). 2009 Jul 1:361-72.
3. Ariyo A. Productivity of the Nigerian Tax system: 1970 to 1990, African Economic Research Consortium, Nairoboi Kenya. 1998.
4. Festus AF, Samuel FA. CompanyIncomeTaxandNigeria Economic Development European Journal ofSocial Sciences––Volume22, Number2; 2007.
5. Adereti SA, Sanni MR, Adesina JA. Value added tax and economic growth of Nigeria. European Journal of Humanities and Social Sciences. 2011;10(1):456-71.
6. Bhartia HL. Public Finance. 14th Edn, Vikas Publishing House PVT Ltd, New Delhi. 2009.
7. Lawal SF, Coker AO, Solanke EO, Ogunbi O. Serotypes among Lancefield-group G streptococci isolated in Nigeria. Journal of medical microbiology. 1982 Feb 1;15(1):123-5.
8. Ahmed S. The promise of happiness. Duke University Press; 2010 Mar 16.
9. Obiechina ME. Capital flows and financial crises: Policy issues and challenges for Nigeria. CENTRAL BANK OF NIGERIA. 2010 Mar;48(1):93.
10. Asher J, Warren M, Fox R, Harding P, Jeffcoate G, Jeffcoate S. The millennium atlas of butterflies in Britain and Ireland. Oxford University Press; 2001.
11. Soyode L, Kajola SO. Taxation principles and practice in Nigeria. Ibadan: Silicon Publishing Company. 2006.
12. Muriithi C. The relationship between government revenue and economic growth in Kenya. International Academic Journal of Information Sciences and Project Management. 2013;1(1):87-109.
13. Chaudhry IS, Munir F. Determinants of Low Tax Revenue in Pakistan. Pakistan Journal of Social Sciences (PJSS). 2010 Dec 1;30(2).
14. Olaoye FO, Adedeji AQ. Performance Benchmarking Of Selected Southwest States Government. Advances in Social Sciences Research Journal. 2017 Dec 24;4(24).
15. Oyejide TA, Soyode A, Kayode MO. Nigeria and the IMF. Heinemann Educational Books (Nigeria); 1985.
16. Onyeiwu C. Monetary policy and economic growth of Nigeria. Journal of Economics and Sustainable Development. 2012;3(7):62-70.
17. Schwartz PJ, Stramba-Badiale M, Segantini A, Austoni P, Bosi G, Giorgetti R, Grancini F, Marni ED, Perticone F, Rosti D, Salice P. Prolongation of the QT interval and the sudden infant death syndrome. New England Journal of Medicine. 1998 Jun 11;338(24):1709-14.
18. Ajayi EA. Nigerian debt management experience. J Central Bank Nigeria. 1989 Apr;13(2).
19. Adofu I, Abula M, Audu SI. An assessment of the effects of interest rate deregulation in enhancing agricultural productivity in Nigeria. Current Research Journal of Economic Theory. 2010 Mar 10;2(2):82-6.
20. Arnone E, Ryan SG, Argast D, Norris JE, Beers TC. Mg abundances in metal-poor halo stars as a tracer of early Galactic mixing. Astronomy & Astrophysics. 2005 Feb 1;430(2):507-22.
21. Oldman O, Aaron H. Assessment-sales ratios under the Boston property tax. National Tax Journal. 1965 Mar 1;18(1):36-49.
22. Ajayi-Obe M, Saeed N, Cowan FM, Rutherford MA, Edwards AD. Reduced development of cerebral cortex in extremely preterm infants. The Lancet. 2000 Sep 30;356(9236):1162-3.
23. Anyanwu JC, Oaikhenan HE. Modern macroeconomics: Theory and applications in Nigeria. Department of Economics & Statistics, University of Benin; 1995.
24. International Monetary Fund. Fiscal Affairs Department. Fiscal implications of the global economic and financial crisis. International Monetary Fund; 2009 Sep 18.
25. Central Bank of Nigeria. Annual Reports and Statistical Bulletin; 2010.
26. Agu C. Does the Policy Reaction Function of the Central Bank of Nigeria Follow Any Benchmark?. International Journal of Economic Perspectives. 2008 Jun 1;2(2):104.
27. Smith A. An inquiry into the nature and causes of the wealth of nations: Volume One. London: printed for W. Strahan; and T. Cadell, 1776..
28. Kiabel BD, Nwokah NG. Boosting revenue generation by state governments in Nigeria: The tax consultants option revisited. European Journal of social sciences. 2009;8(4):532-9.
29. Vincent C, Neale G, Woloshynowych M. Adverse events in British hospitals: preliminary retrospective record review. Bmj. 2001 Mar 3;322(7285):517-9.
30. Burness ML, Grushko TA, Olopade OI. Epidermal growth factor receptor in triple-negative and basal-like breast cancer: promising clinical target or only a marker?. The Cancer Journal. 2010 Jan 1;16(1):23-32.
31. Likita. Elements of Public Finance. Marhel Business Centre 103 Lower Mission Road, Ilaro. First Edition; 1999.
32. Aladejare SA. Government spending and economic growth: evidence from Nigeria; 1999.
33. Kayode MO. The National Question and Revenue Allocation: An articulation of some of the problems and issues.

The National Questions and Economic Development in Nigeria Ibadan: Nigerian Economic Society. 1993.

34. Akinola A. Whycorruptionresidesin Nigeria‖HeadlinesDailyTimespg1-3; 2001.
35. Jhingan ML. The Economics of Development and Planning (28th Revised Edition).New Delhi: Prabhat Offset Press; 1995.
36. Das K, Sarkar R, Ahmed SM, Mridha AR, Mukherjee PS, Das K, Dhali GK, Santra A, Chowdhury A. "Normal" liver stiffness measure (LSM) values are higher in both lean and obese individuals: A population-based study from a developing country. Hepatology. 2012 Feb 1;55(2):584-93.
37. Imoudu EC. The impact of foreign direct investment on Nigeria's economic growth; 1980-2009: Evidence from the Johansen's cointegration approach. International Journal of Business and Social Science. 2012 Mar 1;3(6).
38. Omoruyi SE. Growth and Flexibility of Federal Government Tax Revenue: 1960-1979. Economic and Financial Review. 1983;21(1):11-9.
39. 刘建雄, 刘海霞, 李东燕. 急性 脑卒中 患者 血清 脑脊液 脑脊液 脑脊液 脑脊液 缺失 关系 关系 关系 关系 (Doctoral dissertation).
40. Imfeld A, Oechslin MS, Meyer M, Loenneker T, Jancke L. White matter plasticity in the corticospinal tract of musicians: a diffusion tensor imaging study. Neuroimage. 2009 Jul 1;46(3):600-7.
41. Medee PN, Nenbee SG. Econometric Analysis of the impact of fiscal policy variables on Nigeria's economic growth (1970-2009). International Journal of Economic Development Research and Investment. 2011 Apr;2(1):171-83.
42. Gacanja EW. Tax revenue and economic growth: an empirical case study of Kenya. Unpublished MBA Project, University of Nairobi. 2012.
43. Worlu CN, Nkoro E. Tax revenue and economic development in Nigeria: A macroeconometric approach. Academic Journal of Interdisciplinary Studies. 2012 Nov 2;1(2):211-23.
44. Okafor CI. The metabolic syndrome in Africa: Current trends. Indian journal of endocrinology and metabolism. 2012 Jan;16(1):56.
45. Adams PD, Afonine PV, Bunkóczi G, Chen VB, Davis IW, Echols N, Headd JJ, Hung LW, Kapral GJ, Grosse-Kunstleve RW, McCoy AJ. PHENIX: a comprehensive Python-based system for macromolecular structure solution. Acta Crystallographica Section D: Biological Crystallography. 2010 Feb 1;66(2):213-21.
46. Johansen S. Estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models. Econometrica: Journal of the Econometric Society. 1991 Nov 1:1551-80.
47. Jordaan AC, Eita JH. Export and economic growth in Namibia: a Granger causality analysis. South African Journal of Economics. 2007 Sep;75(3):540-7.
48. Carpenter AE, Jones TR, Lamprecht MR, Clarke C, Kang IH, Friman O, Guertin DA, Chang JH, Lindquist RA, Moffat J, Golland P. CellProfiler: image analysis software for identifying and quantifying cell phenotypes. Genome biology. 2006 Apr;7(10):R100.
49. Adegbie FF. Customs and Excise Duties Contribution towards the Development and Growth of Nigerian Economy‖ European Journal of Economics, Finance and Administrative Sciences ISSN 1450-2275 Issue 29; 2010.
50. Olashore OB. Job characteristic, work-home conflict, and productivity among workers in western Nigeria. Unpublished M. Ed Thesis, Department of Guidance and Counselling, University of Ibadan, Ibadan, Nigeria. 1999.
51. Hall BH. R&D tax policy during the 1980s: success or failure?. Tax policy and the economy. 1993 Jan 1;7:1-35.
52. Ripley BD. Pattern recognition and neural networks. Cambridge university press; 2007.
53. Bonu NS, Motau P. The impact of income tax rates (ITR) on the economic development of Botswana. 2009.