Examining the Relationship between Federal Government of Nigeria's Revenue and Expenditure Profiles

Kanu, Success Ikechi[1][*]Ozurumba Benedict Anayochukwu[1] and Ihemeje, Jacinta .C[2]
1.Department of Management technology (FMT), Federal university of technology, Owerri (FUTO) P.M.B1526, Owerri, Imo State, Nigeria
2.Department of Business Administration, College of Management Sciences, Michael Okpara University of Agriculture, Umudike, P.M.B 7267, Umuahia, Abia State, Nigeria
E-mail: ikechykanu @yahoo.com, Ozurumbabenedict@yahoo.com ihemejejacinta@gmail.com

Abstract
This paper examines the relationship between federal government of Nigeria's revenue and expenditure profile for the period 1970 to 2011. With the aid of E-view statistical package - version 7.0, granger causality tests were carried out on a time series data and to avert the emergence of spurious results, unit root tests were conducted. Other econometric advances of co- integration test and descriptive statistics were deployed to ascertain the order of co- integration and the level of relationships. Outcome of study provides us with mixed results. First, there is a significant unidirectional causal movement from expenditures to revenues for 4 of the 8 revenue–expenditure pairs. This represents an average level of adherence to the Spend -Revenue hypothesis. Second, a significant bidirectional causal effect exists between 4 of the 8 receipt –expenditure pairs. This also indicates that Revenue – Expenditure relationship at the federal level of government in Nigeria finds prevalence in the fiscal synchronization hypothesis. It was ascertained that, ratio of Nigeria's oil revenue to her federally collected revenue stood at 81%., while that of non –oil accounted for 19% of the total. That is a clear manifestation of her age's long dependence on crude oil exports. It was equally noted that, the ratio of federal government's retained revenue to her federally collected revenue stood at about 39%. A functional classification of the expenditure profile reveals that outlays on recurrent expenditure accounted for about 68% of total expenditure, while the remaining balance of 32 % went to capital expenditure. That is certainly not good enough for a nation that is aspiring to grow. A further classification of the expenditure profile indicates that outlays on Administrative services accounted for 33% of the total, economic services 22%, Social and community services 15% and transfers 30%. The indications are rife that, the administration sector and external debt service transfers attracted more than their fare share of public expenditure to the detriment of the economic and social / community welfare sectors. The implication is that directly productive activities such as agriculture, industry and commerce, construction, transport and communication, education, health services and environmental development were relatively underfunded as compared to defense, internal security, general administration and external debt servicing. From the foregoing analysis, it has become imperative that changes must occur in the expenditure structure of federal government of Nigeria, in order to enhance the effectiveness of her fiscal policy instruments and to achieve set goals and objectives. There is therefore the need for a policy shift from the present protective-sectors-dominance to productive- sectors –dominance. The study recommends that as government plans, budgets and implements her expenditure decisions; she should be mindful of her overall level of revenue accruals; set priorities for its allocation and to ensure quality within each of the expenditure categories. These calls for fiscal planning whose primary goals should be to forecast and to take cognizance of resource constraints and the linkages it spurs within the larger economy
Keywords: Total Revenue, Retained Revenue, Recurrent Expenditure, Capital Expenditure, Total Expenditure, Fiscal Deficits.

1.0. Introduction: In the 1970s and 1980s, most developing countries experienced serious fiscal imbalance. This manifested in rapid growth in public spending which overshot domestic revenues. In Nigeria for example, while total federal government retained revenue was N448 million in 1970, total federal government expenditure in nominal terms was N903.9 million. Forty one years down the line (2011), total federal government retained revenue stood at N3, 140.64 billion, while her total expenditure in nominal terms was N4, 299.16billion (CBN statistical bulletin, 2011). The resulting fiscal imbalance has been adjudged to be unsustainable and if the trend continues, and this is very likely to, then government revenue must be made to obey the same trend in order to avert or eliminate a continued budget deficit which has become the order of the day.

From the foregoing analysis, it has become necessary to ascertain the relationships existing between governments' financing capability and her expenditure profile. This paper will examine in details, which of the four hypotheses: Revenue- Spend, Spend- Revenue, fiscal synchronization or the institutional separation hypothesis that is applicable to the federal government of Nigeria. A review of this background information will form the bedrock of our study.

The rest of the paper is organized such that section 2 will give a brief review of literature, section 3 data and the

methodology used, section 4 estimation and results, while section 5 will come up with the concluding remarks and recommendations.

1.1 Statement of Research Problem:

From 1970 to 2011; Nigeria as a sovereign nation has witnessed both the military and democratic forms of government; with each government harnessing the resources of the nation to execute its budget. From all indications, the federal government of Nigeria is saddled with a lot of fiscal and monetary responsibilities. The nation has witnessed a tremendous increase in her revenue profile especially through accruals from oil exports. Ironically, there has been an increase too, in her expenditure pattern overtime. Paradoxically, it does not appear as if the increase in revenue is in any way at par with her expenditure profile. The nation has certainly obeyed Wagner's law of increasing public expenditure. This trend is becoming quite disturbing and is contributing to Nigeria's mounting deficit financing problems.

1.2 Objectives of the study:

Clearly, the main objective of this study is to review the finances of federal government of Nigeria and to ascertain   the level of relationships existing between her revenue and expenditure profiles.

1.3 Research Question:

Whenever the issue of revenue– expenditure nexus is discussed in Nigeria, the natural questions that readily comes to mind is if the federal government of Nigeria is capable of pulling through in her constitutionally assigned role of fiscal sustainability; if she is in a position to improve on her revenue generation drive to match with the ever increasing expenditure outlays and if there exists a causality relationship between her revenue and expenditure profiles. The present study would search for answers to these questions.

1.4 Hypothesis:

There is no causality relationship between federal government of Nigeria's revenue and expenditure profiles.

1.5 Scope of the study:

The relationship between government revenue and expenditures is a very broad area. This study as a matter of fact is limited only to the federal government of Nigeria. The scope of investigation is delineated from 1970-2011, a period of 42 (Forty two years).

2.0 Literature

2.1) Theoretical Framework

Over the years, economists have examined the concept of causality relationships between government revenue and expenditures and have come up with four alternative hypotheses to explain this phenomenon. This includes:

1)   The Revenue- Spend hypothesis,   2) The Spend-Revenue hypothesis

3) The fiscal synchronization hypothesis,   4). The institutional separation hypothesis

These are briefly reviewed below:

The Revenue-Spend hypothesis posits that, the rise in revenues leads to an increase in government expenditures and consequently worsens the governmental budgetary balance. In other words, government would spend all of its revenues, and therefore raising government revenues would lead to higher government expenditures. Thus, a cut or reduction in revenue generation is a necessary policy to keep budget deficit under control.

The Spend-Revenue hypothesis relies on the opposite relation, supported by Barro (1974), and Peacock and Wiseman (1979). According to this hypothesis, a rise in expenditures leads to an increase in revenues. In other words, government determines the expenditures first and then increases taxes / revenues to finance these expenditures. Therefore, cutting expenditures is a necessary and effective policy to control or reduce budget deficits.

The fiscal synchronization hypothesis stipulates that a bidirectional causality relationship exists between government revenue and spending. According to this hypothesis, overtime, spending decisions are made in relation to revenue projections. Expressed differently, spending decisions are not made in isolation from revenue expectations. The hypothesis further posits that government determines its expenditures and revenues simultaneously based on the cost benefit analysis of the planned government programs.

The institutional separation hypothesis is an opposite view of the fiscal synchronization hypothesis. According to this hypothesis, government determines its expenditures and revenues independently.

## 2.2 Conceptual Framework on Government Revenue and Expenditures in Nigeria

2.2.1) Sources of government Revenue: Prior to 1984, Nigeria's major sources of public revenue could be grouped into tax and non tax revenues Taxes refer to compulsory, non returnable contribution (of money or occasionally of goods and services) from private individuals, institutions or groups to the government (Anyanwu:1993).Taxes are generally classified into both direct and indirect groups.

Non tax revenues are classified into administrative revenues, commercial receipts and grants .However from 1984, a new reporting system for Nigeria's revenue profile was adopted. This consisted of oil revenue, non oil revenue, internally generated revenue, revenues from dedicated accounts, federal allocations and loans (External

and Internal loans).

For the period under review, the oil sector contributed about 81% to Nigeria's federally collected revenue, while the non –oil sector contributed about19 % to the nations' coffer. As at 2011, non oil revenue is composed basically of proceeds from corporate tax, customs and excise and the VAT pool account .Others are federal government independent revenue, Education tax fund, customs levies and the NITD funds. Chart 1 below, is a graphic representation of Nigeria's revenue inflow via the oil and non oil sectors.

Chart 1: Oil and Non- Oil revenues
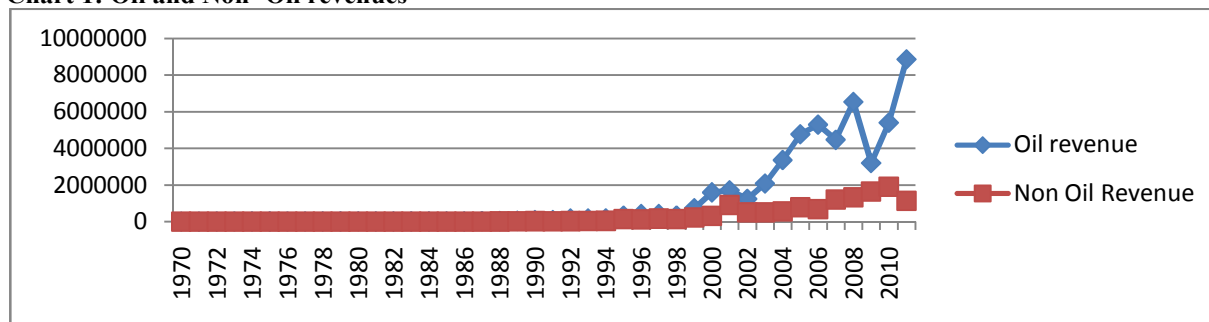
Source: Federal Ministry of Finance & Central Bank of Nigeria

2.2.2) Structure of Government Revenue:

Nigeria operates a federal structure with three tiers of government exercising different rights of revenue administration and collection. For an adequate understanding of the nature and structure of government revenue in Nigeria, the following shall be considered.

2.2.2.1) federally –Collected Revenue:

These are revenues, which fall within the federal government jurisdiction of administration and collection. The federal government does not have exclusive right over the federally collected revenue; it shares some of it with other components of the federating units.

2.2.2.2) Federation Account:

Section 162(1) of the 1999 constitution of federal republic of Nigeria provides as follows; " the Federation shall maintain a special account to be called '' the Federation Account'' into which shall be paid all revenues collected by the government of the federation, except the proceeds from the personal income tax of the personnel of armed forces of the federation, the Nigerian Police, the ministry or department of government charged with the responsibility for foreign affairs and the residents of the Federal Capital Territory, Abuja. What is pooled into the federation account is distributed monthly among the federal government and other federating units through the Federation Accounts Allocation Committee. (FAAC)

2.2.2.3) Independent Revenue of Government:

These are revenues collected by the Federal government, and it has exclusive right over it. They are not subject to sharing by the three tiers of government and it does not find itself into the Federation Account.

2.2.2.4) Federal Government Retained Revenue:

 This constitutes the sum of Federal Government direct share of the Federation account, which is based on the prevailing revenue sharing formula existing among the three tiers of government and other revenues (independent revenue earnings), it has exclusive right to administer and collect. The government retained revenue is largely dependent on the quantum of the total federally –Collected Revenue, other revenue sources and the prevailing revenue sharing formula of FAAC funds. Its value is usually high, when compared with the state and local government value. As at 2011, federal government's retained revenue is composed of proceeds from federation account, Excess crude account, independent revenue, VAT pool account and others. A pictorial representation of total federally collected and retained revenues are depicted in chart 2 below. Difference between the two represents what was allocated to the other tiers of government.

Chart 2: **Total federally collected revenue and Retained revenue**
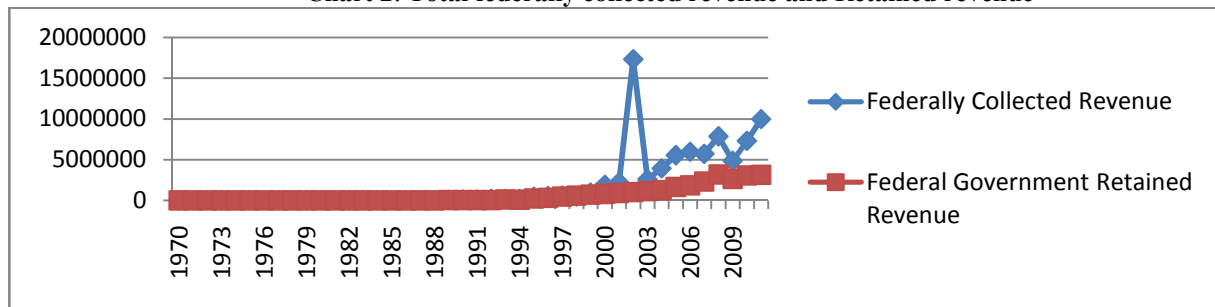
Source: Federal Ministry of Finance & Central Bank of Nigeria

2.2.2.5 Deficit financing:

Nigeria as a sovereign nation has been involved in one form of deficit financing or the other. This includes borrowing from abroad (External loans).This, got us enmeshed in a debt overhang imbroglio; but we were eventually let off the hook following the debt relief program of 2006. The country has equally been borrowing from within i.e. (domestic loans) as well as money creation and acceptance of grants, to finance her expenditure profile

2.2.7) Government Expenditure structure and categorization

Expenditure structure addresses the question of how expenditure is composed of. An expenditure structure facilitates the accounting aspects of fiscal management, while lending itself to central control over decentralized expenditure. Such public expenditure refers to the absorption of resources involving all expenses which the public sector incurs for its maintenance, for the benefit of the economy, external bodies and other countries (Anyanwu, 1994). Public expenditure is usually categorized into recurrent and capital expenditure. This is aptly captured in chart 3 below.

**Chart 3: Recurrent, capital and total expenditure profile of Nigeria (1970-2011)**
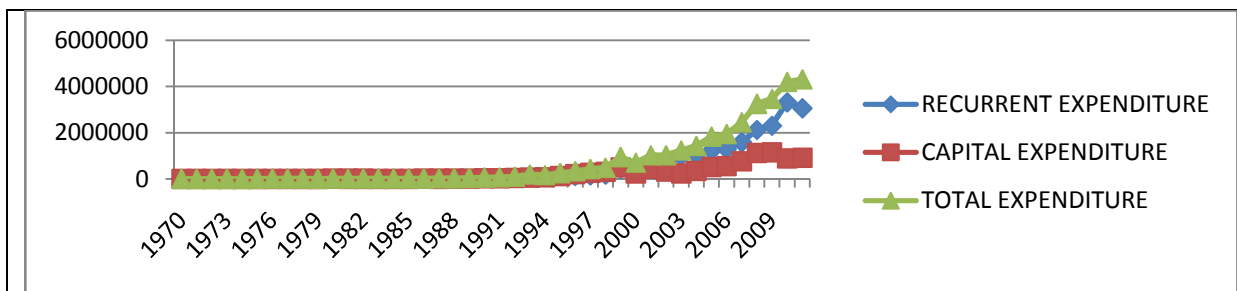
Source: Federal Ministry of Finance & Central Bank of Nigeria

From chart 3 above, Nigeria's total expenditure profile has always been on the increase**.** While recurrent expenditure accounted for about 68% of total outlays, the remaining balance of 32 % went to capital expenditure. That is certainly not good enough for a nation that is aspiring to grow!

Capital and recurrent expenditures are further broken down into their functional compositions .For example, recurrent expenditure is composed of administration (general administration, defense, internal security; Social and community services (Education, Health and Others) and transfers (public debt charges or interests for both internal and external debts, pensions and gratuities, and others such as transfer to contingency fund, net depreciation on the revaluation of investments and extra budgetary expenditures. For the period under review, outlays on Administration accounted for about 33% of total expenditure profile. Outlays on economic services accounted for 22%, Social and community services 15% and transfers 30%. The above information is aptly depicted in chart 4 below.

Chart 4: Administration, Economic, Social and Community Services and Transfers
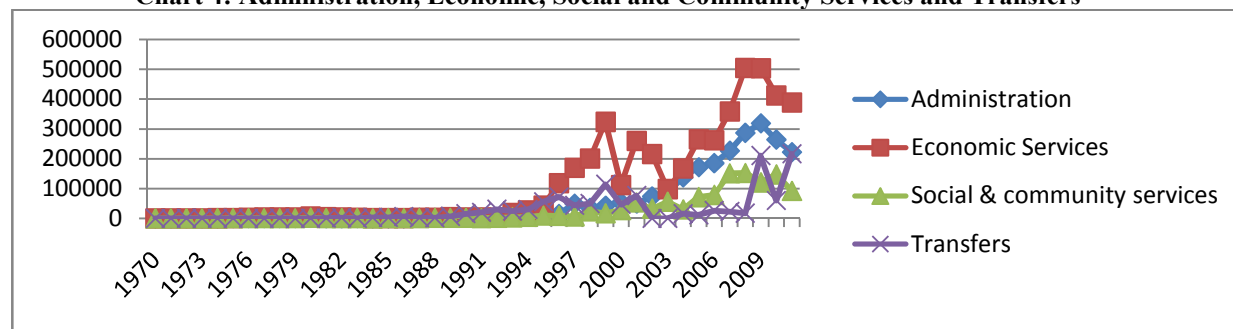
Source: Federal Ministry of Finance & Central Bank of Nigeria

From chart 4 above, it could be seen that, the administration sector and external debt service transfers attracted more than their fare share of public expenditure to the detriment of the economic and social/ community welfare sectors. This implies that directly productive activities such as agriculture, industry and commerce, construction, transport and communication, education, health services and environmental development were relatively underfunded as compared to defense, internal security, general administration and external debt servicing. In the light of this development, it is advocated that, there be a policy shift in Nigeria's public expenditure commitments from the present protective-sectors-dominance to productive- sectors –dominance

2.3 Empirical Review:

The relationship between revenue and expenditure profiles has attracted a plethora of studies. Some of the studies provided support for the spend - tax hypothesis. This includes Furstenberg et al (1996) for the USA; Hondroyiannis and Papapetrou(1996) for Greece, and Waheed(2008) for turkey. Others did provide support for the tax-spend hypothesis. This includes Darrat(1998), for Turkey, Moalusi(2004) ,for Botswana and Obioma and Ozughalu(2010), for Nigeria. While the study by Raju(2008) ,for India advocates both the Spend –Tax and Tax-Spend hypotheses, research by Chowdhury (2011) for USA, infers that the US economy exhibited trends that are in consonance with the four known causality relationship theories on revenue and expenditure. The above conflicting empirical results could be traced to the different moulds of public sector financial management techniques adopted by different countries. This study will go beyond the usual causal relationship between revenue and expenditure. We intend to relate revenue with the functional components of total expenditure i.e. Administration, Economic service, Social and community service and transfers at the federal level of government in Nigeria. That is a research gap, which the present study intends to cover

3.0 Research Methodology

3.1 Data Collection: Data for this study was sourced from Central Bank of Nigeria's Statistical Bulletin, for the period 1970 to 2011.

3.2 Model specification: In this research, granger causality test as well as descriptive statistics will be used to ascertain the relationship between total retained revenue of federal government of Nigeria and her expenditure profile. This will be carried out under the following broad classifications:

- Retained revenue and total expenditures,
- Retained revenue, Recurrent and Capital expenditures
- Retained revenue, Administrative, Economic, Social and community services and Transfers.
- Retained revenue, total government expenditures and budget deficits.

Where:

TR-REV =Total retained revenues accruing to the federal government of Nigeria.

T-EXP = Total expenditure profile of federal government of Nigeria.

R-EXP= Total Recurrent Expenditure profile of federal government of Nigeria

C-EXP = Total Capital expenditure profile of federal government of Nigeria

ADM = Expense on Administrative services rendered by the federal government of Nigeria.

ECONS = Expense on Economic services rendered by the federal government of Nigeria

SOCL = Expense on Social and community services rendered by the federal government of Nigeria and

TRSF = Total transfers charges effected by the federal government of Nigeria.

3.3. Review of the Econometric tools:

Econometric techniques such as Phillip Perron unit root test, Johansen co-integration and granger causality tests will be applied in this study. Other analytical tools will include the use of descriptive statistics.

4.0 Data Presentation and Analysis:

As a prime objective, this section focuses on analysis of data for the study. Also, it aims to interpret the results obtained therein, so that policy implications can be drawn. Our data set will be analyzed through two approaches, namely the descriptive and Inference statistics. While inference statistics will be employed to analyze the formulated hypothesis of this study, other objectives of the research will be met with the use of descriptive statistics.

4.1 Data Presentation:

 Data for our estimation (federal government of Nigeria's retained revenue and expenditures) was generated from various issues of Central Bank of Nigeria's statistical bulletin and the federal ministry of finance. These are aptly captured in the chart 5 below:

Chart5: Federal Government of Nigeria's retained Revenue and Expenditures (1970-2011)
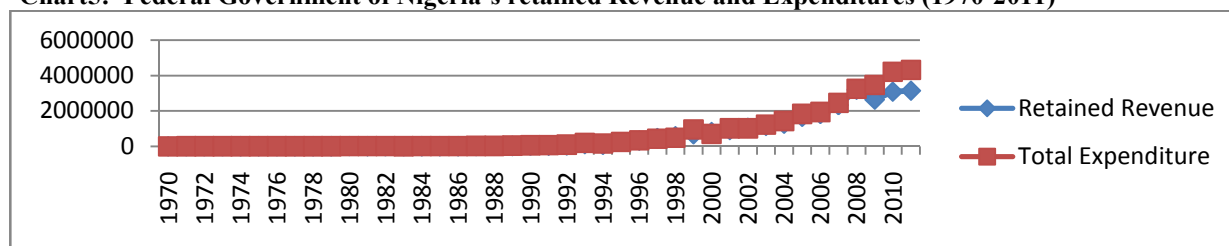
Source: Federal Ministry of Finance & Central Bank of Nigeria

Data Estimation

4.2.1 Unit root test: Federal government of Nigeria's Revenue and Expenditure profiles

The unit root test is carried out using Phillips–Perron test to determine whether the data sets are stationary or not and the order of integration. From the output table below, we observed a mixed bag scenario. While some variables turned stationary at '' level'', others were at '' first difference''; and yet a third group at ''second difference'', meaning that the data sets are not spuriously related.

Phillips –Perron Unit Root Test

Variables	T-Statistics.	CriticalValue@5%	Order of Integration	Sig.
TR-REV	-5.56	-2.94	Level	**
T-EXP	-5.17	-2.94	Level	**
R-EXP	-6.10	-2.94	1st Diff	**
C-EXP	-6.49	-2.94	1st Diff	**
ADM	-17.03	-2.94	2nd Diff	**
ECON	-14.91	-2.94	2nd Diff	**
SOCL	-19.67	-2.94	2nd Diff	**
TRANSF	-17.64	-2.94	2nd Diff	**

Source: E-view statistical package, version 7.0

4.2.2 Johansen Co- integration test

Two likelihood ratio tests (trace and maximum eigenvalue) were used to test the hypotheses regarding the number of co-integrating vectors. Result of the tests on retained revenue and total expenditure profile of the federal government of Nigeria are reported in the table below.

Trace test					Max Eigen value test				
Hypothesized No. of CEs	Eigen value	Trace Stats	0.05 Critical value	Prob**	Hypothesized No. of CEs	Eigen value	Max-Eigen Stats	0.05 Critical value	Prob**
None *	0.979716	273.1146	69.81889	0.0000	None *	0.979716	155.9171	33.87687	0.0001
At most 1 *	0.816807	117.1975	47.85613	0.0000	At most 1 *	0.816807	67.88855	27.58434	0.0000
At most 2 *	0.576305	49.30896	29.79707	0.0001	At most 2 *	0.576305	34.34966	21.13162	0.0004
At most 3	0.293088	14.95930	15.49471	0.0601	At most 3	0.293088	13.87397	14.26460	0.0575
At most 4	0.026769	1.085335	3.841466	0.2975	At most 4	0.026769	1.085335	3.841466	0.2975
Trace test indicates 3 co-integrating equations at the 0.05 level * denotes rejection of the hypothesis at the 0.05 level					Max-eigenvalue test indicates 3 co-integrating equations at the 0.05 level* denotes rejection of the hypothesis at the 0.05 level				

Source: E-view statistical package, version 7

It is pertinent to mention here that; tests were run between total retained revenues and the functional classifications of public expenditure. The first was on recurrent and capital expenditures, while the second was on their component parts, i.e. Administration, economic, social and community services and transfers. Results of the two tests are basically the same. While trace statistics yielded a co-integration rank of r = 3, maximum

eigenvalue also produced a co-integration rank of r=3, where r represents the number of co-integrating vectors and n, the number of variables in the estimated equation. This verifies the existence of an underlying long run stationery steady state relationship between retained revenues and the component parts of Nigeria's expenditure profile. Thus, we reject the null hypothesis of no co-integration(r=0) amongst the variables.

4.2.3 Test of hypothesis:

H_{01}: There is no causality relationship between federal government of Nigeria's revenue and expenditure profiles.

Null Hypothesis:	Obs	F-Statistic	Prob.
TR_REV does not Granger Cause T_EXP	40	0.02459	0.9757
T_EXP does not Granger Cause TR_REV		**5.48088**	0.0085
Null Hypothesis:	**Obs**	**F-Statistic**	**Prob.**
TR_REV does not Granger Cause R__EXP	40	**8.08359**	0.0013
R__EXP does not Granger Cause TR_REV		**4.76447**	0.0148
TR_REV does not Granger Cause C_EXP	40	**6.45551**	0.0041
C_EXP does not Granger Cause TR_REV		**8.87117**	0.0008
TR_REV does not Granger Cause T_EXP	40	0.02459	0.9757
T_EXP does not Granger Cause TR_REV		**5.48088**	0.0085

Source: view statistical package, version 7

Null Hypothesis:	Obs	F-Statistic	Prob.
TR-REV does not Granger Cause ADM	40	**11.0335**	0.0002
ADM does not Granger Cause TR-REV		**7.20103**	0.0024
TR-REV does not Granger Cause ECONS	40	0.13090	0.8777
ECONS does not Granger Cause TR-REV		**6.83199**	0.0031
SOCL does not Granger Cause TR-REV	40	**6.89255**	0.0030
TR-REV does not Granger Cause SOCL		**13.3747**	5.E-05
TRNSF does not Granger Cause TR-REV	40	**7.30598**	0.0022
TR-REV does not Granger Cause TRNSF		0.07415	0.9287

The above hypothesis is stated in a null form while the alternative is implied. For the period under review, result of the Granger causality test indicates that: (i) Total expenditure granger causes total retained revenue (ii) There is a bi-directional causality relationship between total retained revenue, capital and recurrent expenditures.(Iii) There is also a bi-directional causality relationship between total retained revenue and expenditure profiles on administration, social and community services.(iv) Lastly, It was also ascertained that expense profiles on transfers and economic services granger cause total retained revenues.

A further proof of relationships could be ascertained from average growth rate and descriptive statistics on retained revenue and total expenditure profile as highlighted in tables 1 and 2 below:

The periods 2001-2011 and 1991-2000 recorded the lowest and highest average growth rates respectively in government retained revenue. The period 1971-1980 recorded the highest growth rate in federal government expenditure profile. This coincides with the oil boom era, while the period 1981-1990 recorded the highest average decline rate in government expenditure.

Table 1: Average growth rate of federal government retained revenue and expenditure profile (1971-2011)

Period	Average growth rate of federal government retained revenue	Average growth rate of federal government expenditure
1971- 1980	46.27%	38.7%
1981-1990	18.9%	17.6%
1991-2000	47.2%	34.0%
2001-2011	5.16%	18.55%

Computed by the authors

Table 2 below, highlights some basic descriptive statistics relating to the growth rate of government retained revenues and total expenditure profile for the period 1970-2011. The mean growth rate of total retained revenue is 29.92%, the maximum is 176%, the minimum is -92% and the standard deviation is 55.74%, while the mean growth rate of total expenditure is 26.78%, the maximum is 117%, the minimum is -26 and the standard deviation is 34.61

Table 2: Descriptive statistics on total retained revenue and total expenditure profiles (1971-2011)

	Total Retained Revenue	Total Expenditure
Mean	29.91775	26.77500
Median	19.50000	22.50000
Maximum	176.0000	117.0000
Minimum	-92.00000	-26.00000
Standard Deviation	55.73579	34.61472
Skewness	0.975910	0.961542
Kurtosis	4.306252	3.580629
Jarque bera	9.193160	6.725635
probability	0.010086	0.034638
sum	1196.710	1071.000
Sum squared deviation	121152.7	46728.98
observations	40	40

Source: E-view statistical package, version 7

Looking at the two distributions, it could be seen that the mean growth rate of total retained revenue is higher than that of total expenditure. The standard deviation of growth rate on total retained revenue is equally higher than that of total expenditure; the maximum growth rate of total retained revenue is also higher than that of total expenditures. The minimum growth rate of total retained revenue is the lower of the two distributions.

Next, we'll try to establish further relationships with the use of ratio analysis on Nigeria's revenue and expenditure profiles.

Table 3: Ratio analysis on Nigeria's revenue and expenditure profiles (1970-2011)

S/no	Description	Ratio	Output (%)
1	Ratio of oil revenue to total federally collected revenue	OR/TFCR*100	81%
2	Ratio of Non- oil revenue to total federally collected revenue	NOR/TFCR*100	19%
3	Ratio of Retained Revenue to Total federally collected revenue	TRR/TFCR*100	39%
4	Ratio of capital expenditure to total expenditure	TCE/TE *100	32%
5	Ratio of recurrent expenditure to total expenditure	TRE /TE*100	68%
6	Ratio of federal government's expense on Administrative services to total expenditure	ADM/TE*100	33%
7	Ratio of federal government's expense on Economic services to total expenditure	ECONS/TE*100	22%
8	Ratio of federal government's expense on Social and Community services to total expenditure	SOCL/ TE*100	15%
9	Ratio of government's transfers to total expenditure	TRSF/TE*100	30%

Data was sourced from various issues of CBN's statistical bulletin, while computations were done by the authors.
From table 3 above, it could be seen that:

- The ratio of Nigeria's oil revenue to her total federally collected revenue stood at 81%.The implication of this statistic is that the Nigerian economy is a mono economy, solely hinged on crude oil export.
- The ratio of Nigeria's non- oil revenue to her total federally collected revenue stood at 19%.This infers that Nigeria has a dire need to diversify her revenue base away from oil.
- The federal government of Nigeria retained about 39% of federally collected revenue, while the remaining balance went to the other two tiers of government.
- Analysis of expenditure profile showed that outlays on recurrent expenditure accounted for about 68% of the total while the remaining balance of 32% went to capital expenditure. This is certainly not good enough for a nation that is aspiring to grow.
- As a proportion of federal government expenditure, Administrative service accounted for 33%, economic service 22%, Social and community services 15% and transfers 30%.

Findings, Conclusion and recommendations
It is pertinent at this juncture to briefly summarize the outcome of our research efforts, thereafter we make some policy recommendations based on the findings.

5.1 Summary of findings
- Result of the Granger causality test indicates that:
  (i) Total expenditure granger causes total retained revenue

(ii) There is a bi-directional causality relationship between total retained revenue, capital and recurrent expenditures

(iii) There is also a bi-directional causality relationship between total retained revenue and outlays on administration, social and community services.

(iv) It was equally ascertained that expense profiles on transfers and economic services granger cause total retained revenue.

- The ratio of Nigeria's oil revenue to her federally collected revenue stood at 81%, while that of non –oil accounted for 19%.
- The ratio of federal government retained revenue to federally collected revenue stood at 39%
- A functional classification of federal government of Nigeria's expenditure pattern indicates that while her recurrent expenditure accounted for about 68% of her total expenditure profile, the remaining balance of 32 % went to capital expenditure
- Further classification of the expenditure profile reveals that Administrative services accounted for 33% of total expenditure, economic service accounted for 22%, Social and community services 15% and transfers 30%

5.3 Recommendations:

Since the act of governance is an on- going process, funds will always be needed to run the government. It is clear from the foregoing analysis, that changes must occur in the revenue structure of federal government of Nigeria, in order to significantly enhance the effectiveness of fiscal policy instruments and to achieve set goals and objectives. This, the government can do by:

- Working on her potentially exportable commodities. There is a need to look inwards, for the production of commodities that are needed elsewhere in the larger world. The new initiative on solid minerals and cassava production for export is a move in the right direction.
- Effecting a change in the revenue structure of government. This must become significantly based on domestic production activities, which is in contrast to the ages long dependence on export of primary commodities (Be they agricultural commodities or crude oil).
- Making projections for a long term stability of the Nigerian federation. The inter-tier distribution of jurisdiction over revenue sources urgently requires major adjustment in favor of the states and local governments in order to moderate the dominance of the revenue structure by the federal government.
- Intensifying efforts at independent generation of revenue on matters that falls within her exclusive preserve. The federal government is as guilty as other tiers of government over her dependence on allocation from the federation account.
- Eliminating oil revenue leakages. Accounting for proceeds from oil revenue should be thorough and must be seen to be validly transparent.
- Checkmating the arbitrary cases of crude oil theft within the Niger Delta creeks. Other changes that need be put in place include:
- Increased production of petroleum products: Since the wealth of the nation is hinged on this mono-product, there is need for an increased production of crude oil for export. This is subject to allocation of production quota from the oil cartel-OPEC. Exploration and exploitation of new oil blocks should be encouraged.
- Our VAT output base should be broadened. Efficiency of its collection mechanism need be worked upon.
- Revenues accruing to federal government by virtue of divestments from public institutions should be used in repaying our debt obligations (Be they internal or external obligations) and to clear other outstanding liabilities to contractors.
- Going by our current stunted economic growth rate, tax and tariff exemptions need be reviewed and consequently removed.
- Lastly, the federal government of Nigeria should put more programs on self financing basis through cost recovery measures such as the private partnership payback scheme.

Next, is to take a critical look at the flip side of this discuss i.e. the expenditure profile. As the federal government of Nigeria plans, budgets and implements her expenditure decisions, she is faced by three interrelated tasks: She must control the overall level of expenditure, set priorities for its allocation and to ensure quality within each of her expenditure categories. These calls for fiscal planning whose primary goals should be to forecast and to take into account resource constraints and the linkages it spurs within the economy. The federal government of Nigeria is expected to improve on her public expenditure management through:

- The implementation of a policy shift from her present protective-sectors - dominance to productive-sectors –dominance.
- The rehabilitation of basic accounting system in such a manner that correct and timely recording of

expenditure profiles are captured as they occur. This now becomes an integral part of proper fiscal control and may involve the preparation of simple standardized project profiles for tracking project expenditure.

- Effective coordination of budgeting decisions among the many but dispersed institutions involved.
- Assessment and projection of macroeconomic outlook at short and intermediate runs is very useful for estimating available financial resources.
- The preparation and updating of public investment programs should be taken seriously. This will ensure that projects are accepted only on the condition that they meet satisfactory appraisal criteria at the appropriate stages in its life cycle.
- Setting priorities and developing contingency plans for unexpected shortfall should be a part of fiscal planning and expenditure management such that ''core '' program will receive funding when resources fall short, while others will receive funds only when additional funds are made available.
- Speedy implementation of a comprehensive and consolidated federal budget with its implementation and monitoring components, thus giving no room for extra budgetary expenditure.
- There is need to reform the budget process. The lack of commitment over expenditure control in recent years has made the budget ineffective as a tool for economic stabilization or development. Federal government's policies addressing the desired level spending in total, in a specific ministry, or in a specific sector have been totally ineffective given the lack of adequate controls, checks and balances and accountability. Immediate and sustained corrective actions are required for effective fiscal management and the provision of essential government services to Nigerians.
- There is need for increased transparency in the public sectors .Macroeconomic projections should guide the overall level of expenditure. As such, their projections need to be more realistic, internally consistent and based on more accurate and timely information. Sectoral strategies should be affordable and should include measurable targets in terms of level and quality of services provided.
- Again, there is need to integrate all sources of extra budgetary revenue and financing into the approved budgeting process in a financial year. This should be under the full control and supervision of the federal ministry of finance and the Accountant General of the federation for allocation and disbursement to the ministries, subject to all financial guidelines and direct audit by the Auditor General of the federation.
- Authority to incur expenses should be limited to the budgeted amount. Federal government spending should not exceed the approved budget without a supplementary budget financed from the implementation of new revenue measures
- Comprehensive budgets for the federation account as well as for the federal government of Nigeria which includes the planned and actual level and uses of all revenues, all borrowing, as well as from the special funds and all expenditures should be published regularly.
- The Auditor general of the federation should be empowered to review all details of transactions in all federal government controlled accounts.
- Budget allocations need to match stated or perceived priorities. The federal government of Nigeria should:
- (i) Identify projects which could be handled by the private sectors in order to avoid unnecessary government expenditure (.ii) Reject projects which compete with the private sector or which do not support private sector initiative and development iii) Choose the least alternative for accomplishing social goals (.iv) Emphasis should be on maintenance of assets over the rehabilitation or replacement of damaged assets and.(v) De-emphasize project completion status. Emphasis should be on qualitative output as a poorly designed project is a waste; no matter how far it has been accomplished.
- The federal government needs majority private sector equity stake in most public enterprises. She should divest fully from public enterprises as they are better managed by the private sector.
- The federal government of Nigeria should provide an enabling environment by encouraging business stability, achieving price stability and liberalization of interest rates. Again she should encourage private sector development, reduce governments provision of direct services and to concentrate more on the regulatory role of government.
- Lastly, in order to improve public finances, tackle the challenges of reducing deficits/ debts and restore fiscal sustainability in a regime of weak global economic recovery, the federal government of Nigeria is advised to embark on a fiscal consolidation program. This simply entails a reduction in deficits and accumulation of debts. Such a policy is essential for financial and macroeconomic stability. It is expected to spell out government's efforts to lower the level of deficits while simultaneously limiting the generation of new debt obligations. This she could initiate via a combination of spending cuts and tax hikes.

REFERENCES

Adur Chaudhury(2011)State government revenue and expenditure: A bootstrap panel analysis; department of economics working paper , Marquette University

Agbadudu.A. (1987) Mathematical Methods in Business and Economics, Lagos University press, Lagos.

Anyanwu J.C (2002), Public Finance, Joanee publishers Onitsha, Nigeria

Anyanwu J.C, ''Revenue allocation and stable fiscal federalism in Nigeria''-Nigerian Journal of Economic Management Vol. 1 No2.

Anyanwu and Oikenah.H(2002), "Modern Macroeconomics: Theory and Applications in Nigeria, Joanee publications, Onitsha, Nigeria.

Central Bank of Nigeria, 2010 Annual Report.

Central Bank of Nigeria, 2011 Annual Report

Central Bank of Nigeria statistical bulletin, 2011 edition

Ighodaro CAU and Oriakhi.D.E(2010), Does the relationship between government expenditure and economic growth follow Wagner's law in Nigeria. Annals of the university of Pretrosani economics, 10(2).

Kanu.S.I. (2008), Financing federal government of Nigeria's expenditure (1980-2003).Unpublished M.sc thesis ,Federal university of technology, Owerri.

Kucukkale.Y and Yamak .R (2012), Co-integration, causality and Wagner's law with disaggregated data: Evidence from Turkey (1968-2009); Annual meeting of Missouri Valley Economic Association, Kansas City, USA

Moalus, D.K (2004), Causal link between government spending and revenue: A case of Botswana; Department of Economics, Fordham University.

Musgrave R.A and Musgrave P.B (1989), Public Finance Theory and practice, 5th edition, Singapore; Mcgraw Hill

Nnamocha P.N. (2001), Public Finance: Concepts, principles and Theories, Bon publication Owerri, Nigeria

Nnamocha P.N. (2001), Public Finance for a developing economy: The Nigerian Approach, Bon publication Owerri, Nigeria

Nzotta.S.M.(199). Money, Banking and Finance: Theory and practice, Lagos. International educational books and publishers.

Obioma.E.C and Ozughalu.U.M (2010); An examination of the relationship between government revenue and government expenditure in Nigeria: Co-integration and causality approach; Central Bank of Nigeria's economic and financial review, Vol.48/2

Swati Raju(2008), The Revenue-Expenditure nexus: Evidence for India; Contemporary issues and ideas in social Sciences, Mumbai, India.