International Journal of Economics, Commerce and Management
United Kingdom Vol. V, Issue 2, February 2017
http://ijecm.co.uk/ ISSN 2348 0386

FISCAL FEDERALISM AND ECONOMIC GROWTH NEXUS: EMPIRICAL EVIDENCE FROM NIGERIA

Ohiomu Sylvester
Department Of Economics, Edo University, Iyamho, Edo State, Nigeria
Ohmsylve2@gmail.com

Oluyemi Sunday Ade
Nigerian Deposit Insurance Corporation, Benin City, Nigeria

Abstract

This study analyzes fiscal federalism and economic growth nexus in Nigeria to synthesize the extent to which revenue allocation formula has affected the path of economic growth and sustainable national development. The work uses the methodology of Error correction model (ECM) in conjunction with diagnostic tests of variables using Augmented Dickey–Fuller unit root tests and Johansen Co-integration tests for robust policy recommendations. Using the Gross Domestic Product (GDP) as the dependent variable and Revenue allocation to the three levels of government, inflation and lending interest rate as the independent variables, the results from the study show that revenue allocations and the other variables have significant relationship with economic growth in Nigeria. The study recommends among others that there should be accountability and transparency in the federating units to achieve national goals and objectives. Local governments should be given adequate funds to enable them carry out their expenditure responsibilities to accelerate grass root development in the economy. The machinery for revenue generation and allocation should be improved upon for efficiency and effectiveness to boost internal revenue for government.

Keywords: Economic growth, Error correction model, Fiscal discipline, Revenue allocation, Sustainable development

INTRODUCTION

The economic growth of a country is widely determined by its socio-economic activities which cut across government expenditure and revenue competencies and infrastructural development in the country. Government expenditure or public expenditure refers to the expenses which the government incurs for its own maintenance and for the social economy as a whole. It is an important mechanism government uses to impact on people's lives in terms of living standards and better opportunities.

The size of revenue that government generates at any point in time is influenced by its resource endowment, level of economic activities and the efficiency of its revenue collection machinery. The stability and growth of revenue is a function of the ability of the government to stimulate and sustain a high level of economic activities and an optimal mix of revenue-generating instruments. Although revenue accruing to the government over time has increased in absolute terms, their revenue profile depends largely on statutory allocations while the performance of internally generated revenue has remained unsatisfactory. Ijaiya (1999) was of the view that government resources would also be allocated more efficiently if responsibility for each type of public expenditure were given to the level of government that most closely represents the beneficiaries of these outlays. Prior to the introduction of value added tax (VAT), the three tiers of government relied heavily on their share of Federation Account which in turn depended on developments in the international petroleum market regulated by OPEC. This has serious implication for government finances. Thus, government revenue had been unstable, showing up in deficits and poor delivery of services with expenditures concentrated on recurrent activities in the case of State and Local governments. This explains the use of tax contractors by some state governments and introduction of various kinds of levies by State and Local Governments to improve their revenue. Hence advantage is taken of the country's resource endowments to enhance the revenue potential and raise the level of total federally-collected revenue with the ultimate aim of improving revenue accruable to Federal, State and Local Government through statutory allocations.

In recent years, the issues of resource control, revenue allocation and fiscal federalism have dominated discussions at various levels of Nigeria's political debate. In Nigeria, revenue allocation is taken as the distribution of National Revenue among the various tiers of Government in the Federation in such a way as to reflect the structure of Fiscal Federalism. Federalism refers the existence in one country of more than one level of government, each with different expenditure responsibilities and taxing powers. The Federal Government, 36 State Governments and the 774 Local Governments have a percentage of the revenue allocated from the federation account which is distributed in the following proportions: 48.50 percent to the

Federal Government, 26.72 percent to States, 20.60 percent to the Local Government councils, and 4.18 percent to centrally control special funds on the basis of the following indices and percentage weights: equal shares to each state or locality at 40 percent; population at 30 percent; social development needs at 10 percent; land mass and terrain at 10 percent and internal revenue generation at 10 percent (Suberu, 1994). Normally each tier of Government should be given adequate resources to be able to discharge its constitutional responsibilities, which is very important for the preservation of the autonomy of the constituent units. The importance of revenue generation, allocation as well as its distribution towards maintaining both the existing and new socio-political economic structure in any economy be it centrally planned, market or mixed economies cannot be overemphasized. It studies how competencies (expenditure side) and fiscal instruments (revenue side) are allocated across different (vertical) layers of administration which the Government uses it to enforce National rules and standards. The concept of fiscal federalism is relevant for all kinds of government: unitary, federal and nonfederal. The existence of imbalance between functions and resource base makes it expedient for the higher level of government to transfer revenue to the lower level. This is referred to as 'efficiency transfer or balance'. There are two primary types of transfer: conditional and unconditional. A conditional transfer from a federal body to a province, or other territory, involves a certain set of conditions. If the lower level of government is to receive this type of transfer, it must agree to the spending instructions of the federal government. An unconditional transfer on the other hand is usually a cash or tax point transfer, with no spending instructions (Usman, 2011). These invariably lead to economic growth. This therefore posits that an efficient revenue allocation is of great importance in the equation of growth. Revenue allocation in Nigeria borders on the promotion of national unity and rapid economic growth and it is however sad that despite continuous increase in revenue generation, the expected impact on economic growth in Nigeria has not been realized. Hence the need to empirically examine the revenue allocation formula adopted in the past and its impact on the economic growth process in Nigeria. An optimal revenue allocation formula invariably leads to economic growth in the country.

LITERATURE REVIEW

Numerous studies have been carried out to determine the role of government in the economic growth process of a country. Woller and Phillips (1998) could not find a robust relation between economic growth and decentralization, using a sample of a few developing countries. However, in Nigeria a cross-sectional analysis on the expenditure responsiveness of states to federal allocation during the civilian era by Akinlo (1999), through the use of OLS technique found that

the state government's fiscal expenditure was stimulated by federal grants during the period of analysis. Similarly, Aigbokhan (1999) also employed the OLS technique to investigate the fiscal decentralization on economic growth in Nigeria and finds evidence of which concentration ratio of both expenditure and revenue. It also finds evidence of mismatch in spending and taxing responsibilities with states being higher hit. Yilmaz (2000) on the impact of fiscal decentralization on macroeconomic performance for the period 1971-1990, realized that decentralization of expenditures to the local level increases the growth of real GDP per capita in unitary states more strongly than in federal states. In a cross-country evidence on the relationship between fiscal decentralization, inflation and Growth, Martinez-Vazquez and McNab (2002) find that the decentralization of revenue significantly reduces the growth of real GDP per capita of developed countries, but not of the developing and transition countries. Jimoh (2003) utilizes a causality test using Error Correction Model (ECM) to ascertain the long-run causal relationship and short-run dynamics on the impact of the extent of decentralization of government expenditures and/or revenue allocation on the levels of economic activities in Nigeria. He finds that more decentralized governance especially in terms of increased local governments and increased transfer of revenues to lower tiers of government would stimulate economic activities and/or economic growth in Nigeria. Akinjuobi and Kalu (2009) focus on the role of financing sources of Nigerian State governments in the financing of their real asset investment. Using OLS technique, the study finds that Federal allocation and stabilization funds are significant in the financing of real asset investment at both 5% and 1% level of significance. Internally Generated Revenue (IGR), Loans (LNS), Grants (GT) and Value Added Tax (VAT) are found insignificant in the financing of the real asset investments of Nigerian state governments for the period 1984-2008.

The impact of revenue allocation formula of individual federating units on economic growth of Nigeria is demonstrated in the study of Usman (2011), utilizing OLS technique finds that both shares of federal government and local governments' revenue from federation account contribute to economic growth process in Nigeria. The study finds no contribution of share of states revenue from federation to economic growth process in Nigeria, which is contrary to the findings of the studies of Akinlo (1999) and Akujuobi and Kalu (2009). Usman (2011) uses the growth rate of shares of the federating units from federation account as proxies and finds direct relationship between revenue allocations to federal, states, and local governments and economic growth process in Nigeria. Dang (2013) adopts the preliminary test of time series data, and

ECM and Pair-wise Granger Causality test to ascertain the causal relationship and the direction of causality between revenue allocations and real GDP in Nigeria. The result shows

that that the lag values of all the independent variables (revenue allocations to federal government, states, and local governments) jointly impact on RGDP of Nigeria for the period 1993 to 2012, with only revenue allocation to states showing a negative significant result. This study will also adopt the time series model and a log linear analysis for discrete time series data, Co-integration and error correction mechanism (ECM) using E-views 8 for the analysis of the relationship between revenue allocation and the real GDP in Nigeria.

Principles of Fiscal Federalism

Fiscal Federalism in Nigeria is synonymous with revenue allocation and "resource control". There has always been controversy on the appropriate formula that should be used to divide resources in Nigeria. The concept of fiscal federalism was first introduced in Nigeria in 1946 following the formation of a federation of three regions by splitting the Southern Province into the Eastern and Western Regions, while the Northern Region which was a continuation of the Northern Province remained intact. This followed the adoption of the Richards Constitution, prior to the 1914 amalgamation of Nigeria into the Southern and Northern protectorate and the Crown Colony of Lagos into a single entity. The Nigerian federal system metamorphosed thereafter from a two-tiered federal arrangement initially comprising three unequal political and administrative regions to the current three tiered federal system of 36 states, one Federal Capital Territory and 774 Local Governments (Ijaiya, 1999).

Every government seeks to achieve macroeconomic objectives in a particular system of government. Various systems of government include federation, unitary, and confederation. Nigeria is a federal system of government which achieves her macroeconomic objectives by performing the functions of resource allocation, income distribution/redistribution, and economic stabilization within the central government and its units (states and local governments). This is a system characterized by Fiscal Federalism. Salami (2011) contributed by stating that Fiscal Federalism is the inter-government fiscal relation as enshrined in a federal constitution, provided for the functional responsibilities to be performed by the multi–levels of government and the financial resources that can be raised for provision of collective goods and services. Fiscal Federalism recognizes two or three levels of government in which one central government must not perform the role of the other tiers of government in economic management, thus each level of government have different expenditure responsibilities and taxing powers. In the strong central government approach, the federal government retains the larger share of revenue and the state/ local governments have smaller share out of the federation account. This is known as decentralization. Sharma (2005a) clarifies that while fiscal federalism constitutes a set of guiding principles that helps in designing financial relations between the national and sub national levels

of government, fiscal decentralization on the other hand is a process of applying such principles. However, Likita (1999) is of the view that in the decentralized approach, the federal government retains a lower share, with states and local governments having a larger share out of the federation account. Mbanefoh (1998) argues that, it may be practically impossible to satisfactorily balance the financial resources of a segment of a federation with the functions which it is expected to perform. Okeke (2004) concluded that this imbalance should not be regarded as a result of federalism, but as a result of the disturbances of the equilibrium which ordinarily would allow the segments of the federation to carry out developmental programs that could be undertaken with the available internal resources.

The concepts of fiscal federalism are related to vertical and horizontal fiscal relations. The notions of horizontal fiscal relations are related to regional imbalances and horizontal competition which are non-controversial whereas, the notions of vertical fiscal relations are related to vertical fiscal imbalance between two senior levels of government that is, the centre and the states which are controversial. There are principles that guide fiscal federalism and sustain the overriding factors of administrative efficiency and fiscal independence with the goal aimed encouraging the devolution of more revenue-raising powers to lower levels of government to match the functions assigned to them. These principles according to Ndubuisi (1996) include: Independence and Responsibility, Adequacy and Elasticity, Administrative Economy and Efficiency, Accountability, Uniformity and Fiscal Access

It is according to these principles that the national and international government are granted exclusive powers (exclusive list) and share other powers (the concurrent list). To this effect, there should be certain criteria that should govern revenue allocation in a federal system. First is the fiscal arrangement in a federal system in the sense that there should be proper matching of revenue with responsibilities which will enable the lower units discharge their responsibilities. In addition, fiscal federalism should reflect fiscal justice and fair play through local discretion and devolution of power, hence promoting improved governance, accountability and bringing development to the less developed countries. The central government in particular is seen to be far from the people, thus should deal with issues that are cross-cutting such as defense, foreign affairs, national security, among others while accountability should be enforced at the states and local governments given that they are seen to be closer to the people and feel greater pressure for development from their citizens.

Experts in federalism such as Shah (2009) favor increased autonomy for the lower levels of government, and greater taxation powers that go along with anticipated higher expenditure and responsibilities which implies a complementary reduction in the power of the central

authority. This is however, not a zero-sum game but a win-win solution as each level becomes more efficient and effective in its responsibilities.

The Federation Account was established by Government in order to disburse the funds to the Federal, State and Local Governments in line with the constitution and approved revenue allocation formula. This disbursement is usually done by the Federation Account Allocation Committee (FAAC) which consists of Minister of States for Finance (Chairman), Accountant General of the Federation, Commissioners of Finance of the 36 states of the federation and representatives of other institutions such as the Central Bank; NNPC; Federal Inland Revenue Service; Customs, National Pension Commission, Debt Management Office (DMO), usually on a monthly basis.

The Decree No. 49 of 1989 established the Revenue Mobilization, Allocation and Fiscal Commission (RMAFC) to oversee revenue sharing and mobilization. The RMAFC established in 1989 are constitutionally charged with the responsibility of ensuring that this disbursement exercise is accurate, fair and transparent. The constitution provides that all federal revenues must go into the Consolidated Revenue Account and this is a standard practice in most federations. In Nigeria however, an additional account is also established by the constitution, that is the Federation Account into which majority of federally raised revenues must flow with the exception of personal income tax of the personnel of the armed forces of the Federation, the Nigeria Police Force, the Ministry or department of government charged with responsibility for Foreign Affairs and the residents of the Federal Capital Territory, Abuja.

METHODOLOGY

Ordinary Least Squares (OLS) shall be used for the preliminary estimation followed by Co-integration diagnostics tests and Error Correction Model (ECM) on E-views 8 for this study. Time series data from several issues of CBN Statistical Bulletin shall be used for the study covering the period 1984 - 2015. The rationale for this range of period relates to the fact that the mid 1980s witnessed the structural adjustment programme (SAP) in Nigeria when interests for fiscal allocation heightened. Again, full data for 2016 were not readily available at the time if this write-up, hence, the data range stopped at 2015. The study shall carry out unit-root tests using the Augmented Dickey-Fuller (ADF) methodology for stationarity to ensure that regression results are not spurious. Thereafter, the Johansen methodology shall be used to obtain the maximum Eigen values and trace statistics so as to ascertain co-integration between the dependent and the regressors in the model. After this, the error correction mechanism would be carried out to determine the impact of the speed of adjustment of the model to any deviation from the equilibrium.

Model Specification

Theoretically, economic growth is influenced by diverse factors but this study shall adopt the endogenous model which stresses the importance of investment in new knowledge, research and development in technology, capital and labour availability. Thus the expanded model of the endogenous growth model is given by:

Y= *F* (AR, K, L)……(1)

Following the assumption of Romar model, the stock results from expenditure on research and development, AR, is identified by the shares of revenue to the federal, state and local government from federation account into the model. This is because revenue enters the growth equation through expenditure on capital projects and development. Thus the model becomes:

RGDP= *F* (RALFG, RALST, RALG, K, L)……..(2)

In addition, capital accumulation and availability of labour is influenced by the investment in public and private sectors of the economy. However, the lending interest rate to the investors will affect the overall economic growth in the country which goes to affect the amount of capital accumulated for investment purposes. This can attributed to the fact that low lending interest rate will encourage investors to loan funds from the bank and high interest rate will discourage investment. Hence using lending interest rate which is also a determinant of economic growth to capture the availability of labour and capital accumulation, the model is then given by:

RGDP= *F* (RALFG, RALST, RALG, LIN)……(3)

Finally, inflation rate is included to capture macroeconomic instability which has been said to be detrimental to economic growth and development in an economy. These include uncertainty about the profitability of long term investment and tendency toward speculative activities.

Thus the model takes the form of a single equation in economic growth as:

RGDP= *F* (RALFG, RALST, RALG, LIN, INF)……. (4)

Thus converting the above model to an econometric model;

$RGDP= \beta_0 + \beta_1 RALFG_{1t} + \beta_2 RALST_{2t} + \beta_3 RALG_{3t} + \beta_4 LIN + \beta_5 INF + ECM + \mu_t$…….…….. (5)

Applying the log linear analysis to the model ;

$LogRGDP= \beta_0 + \beta_1 logRALFG_{1t} + \beta_2 logRALST_{2t} + \beta_3 logRALG_{3t} + \beta_4 logINF + \beta_5 logLIN + ECM + \mu_t$……(6)

Where,

LogRGDP=log of Real Domestic Product;

logRALFG=log of Revenue Allocation to Federal Government;

logRALST=log of Revenue Allocation to State Government;

logRALG=log of Revenue Allocation to Local Government;

logINF=log of Inflation;

logLIN=log of Lending Interest rate.

ECM= Error Correction Model

β_0 is a constant; β_1, β_2, β_3, β_4 and β_5 are coefficients of the regression model,

μ is the error term(disturbance term) and *t* is the time.

Where,

H_0= β_1, β_2, β_3, β4, β5= 0

H_1= β_1, β_2, β_3 , β_4, $\beta_5 \neq 0$.

Where the a-priori expectation of the explanatory variables are given by:

$\beta_0, \beta_1, \beta_2, \beta_3 > 0$; $\beta_4, \beta_5 > or < 0$

(Note: Consumer Price Index (CPI) will be used as a proxy for Inflation).

ANALYSIS AND DISCUSSION OF FINDINGS

Unit Root Test

The table 1 shows the result of the ADF unit root test conducted on all variables. The result shows that all the variables were non stationary at levels. This is evident from the fact that the absolute value of the calculated ADF test statistic for each variable is lower than their corresponding critical values at the 5 percent level of significance. Thus this shows the presence of unit root.

Table 1: Augmented Dickey Fuller Unit Root Test (E-view 8 output)

Variables	ADF test statistics at levels	Test critical value(5%)	ADF test statistic at first Difference	Test critical value (5%)	Order of integration
LGDP	-0.2507	-2.9571	-4.0096	-2.9604	I(1)
LRAFG	0.2031	-2.9640	-4.7494	-2.9719	I(1)
LRAST	0.1404	-2.9571	-5.1431	-2.9604	I(1)
LRALG	1.1025	-2.9640	-4.1572	-2.9719	I(1)
LCPI	-1.5745	-2.9640	-3.6722	-3.5684	I(1)
LLIN	-1.6021	-3.5578	-5.3564	-2.9604	I(1)

All the variables however became stationary after taking their first difference. This is again evident from the fact that the calculated ADF test statistic of all variables in their first difference form is greater than their respective 5 percent critical values. Since all the variables are stationary at first difference, we can affirm that they are all integrated of order one, i.e. I (1).

Co-integration Test

This test is designed to find out if there exists any long run equilibrium relationship among the variables. This is drawn from the fact that all the variables are stationary at first difference, and of the same order. The Johansen test for co-integration was used to achieve this objective. The result is summarized in table 2.

Table 2: Johansen Co-integration Test

Variables: LGDP, LRAFG, LRAST, LRALG, LCPI, LLIN

Hypothesized No. of CE(s)	Eigen Value	Trace Statistic	5% critical Value	Max-Eigen statistic	5% critical value
None	0.8463	128.1757	95.7537	46.8248	40.0776
At most 1	0.7721	81.3509	69.8189	36.9691	33.8769
At most 2	0.5018	44.3818	47.8561	17.4165	27.5843
At most 3	0.4573	26.9653	29.7971	15.2799	21.1316
At most 4	0.3221	11.6854	15.4947	9.71970	14.2646
At most 5	0.0756	1.96574	3.8415	1.9657	3.8415

Both Trace and Max-Eigen statistics indicate 2 co-integrating equations at 5 percent level of significance.

The result from the Johansen Co-integration test suggests the existence of a long run co-integrating relationship among the variables used in the model. This decision is reached by observing that the null hypothesis of no co-integrating equation is rejected since the values of both the Trace and Max-Eigen statistics are higher than their respective critical values at 5 percent level of significance.

However, the null hypothesis of at most two co-integrating equation cannot be rejected since the values of both the corresponding Trace and Max-Eigen statistics are lower than their respective critical values at 5 percent level. This therefore shows that there exists a long run equilibrium relationship among the variables.

Error Correction Model (ECM)

Having established that the variables are co-integrated via the Johansen test for co-integration, the short-run dynamics of the model can be represented by a parsimonious Error Correction Model. The result is summarized in Table 3.

Table 3: Parsimonious Error Correction Model

Dependent Variable: LGDP

Variable	Coefficient	Std. Error	t-Statistic	Probability	
Intercept	-0.0077	0.0394	-0.1943	0.848	
D(LRAFG)	0.0013	0.1520	0.0086	0.9932	
D(LRAST)	0.2630	0.1276	2.06164	0.0532	**R^2 = 0.7519**
D(LRALG)	-0.0332	0.1080	-0.3072	0.762	**Adj.R^2 = 0.6605**
D(CPI)	0.8280	0.1760	4.7052	0.0002	**F-stat. = 8.2271**
D(LLIN)	0.1176	0.1610	0.7306	0.4739	**Prob. F-stat. = 0.0001**
D(LGDP(-1))	0.0822	0.1442	0.5695	0.5757	**D.W = 1.9411**
ECM(-1)	-0.4109	0.1885	-2.1797	0.0421	

The result shows the existence of a positive relationship between revenue allocation to federal and state government and economic growth. Revenue allocation to local government is however shown to have a negative effect on economic growth. Inflation captured by LCPI and lending interest rate as represented by LLIN are both shown to positively contribute to economic growth. Lastly, economic growth (LGDP) is shown to be positively related to past values of itself (LGDP(-1)).

Judging by the values of the t-statistic of the explanatory variables of the model and their corresponding probabilities, it can be inferred that only revenue allocation to state government (LRAST) and consumer price index (LCPI) are statistically significant determinant of economic growth in the model at the 10 and 1 percent level of significance given that their values 0.0532 and 0.0002 respectively are less than 10 and 1 level of significance while the other variables are shown to be statistically insignificant within the model, that is, revenue allocation to federal government(LRAFG), revenue allocation to local government(LRALG), lending interest rate (LLIN) and past values of economic growth(LGDP(-1)). Hence at 1%, 5%, 10% level of significance, the null hypothesis is rejected meaning that all the values of revenue allocation to federal government, state government and local government from the period of 1984 to 2015 have an impact on economic growth (GDP).

The error correction model (ECM(-1)) appears with the appropriate negative sign and statistically significant at 5 percent level after estimation. This is in agreement with the Johansen co-integration test which showed that there was a long run relationship among the variables. Thus, the ECM will rightly act to correct any deviation of the dependent variable from its long run equilibrium position.

The result also shows that R^2 in this model and its adjusted counterpart is about 75 and 66 percent respectively. This means that about 66 percent of the variations in economic growth (LGDP) are explained by variations in the explanatory variables. This implies that the unexplained variation in the model is just about 34 percent. The value of the F-statistic which is a measure of the significance of R^2 for the model is reasonably high at about 8.22, and also statistically significant even at the 1 percent level. Based on this, we therefore accept the hypothesis that all slope coefficients in the model are simultaneously significantly different from zero and as such the overall model is significant in explaining the changes in economic growth (LGDP) over the sample period. Finally, the Durbin-Watson statistic of about 1.94 is sufficiently close enough to the value of 2 for us to conclude that serial correlation is absent from the model.

Policy Implication

Most empirical studies are carried out to provide policy implications to policy makers. The result shows that the coefficient of revenue allocation to state government has a positive effect on economic growth. A unit increase in revenue allocation to state government increases economic growth by 0.26 units. This implies that revenue allocation to state government contributes to the economic growth in Nigeria. However, the revenue allocation to federal government did not perform as expected as it shows that revenue allocation to federal government only contributes a little to the economic growth in the country-given that they possess the lion share of the federation account. Hence policies should be made towards the minimization of the siphoning of national funds and more efforts should be geared towards embarking on those projects that will improve the standard of living of the citizens to accelerate economic development. Conversely, the coefficient of revenue allocation to local government has a negative effect on economic growth. A unit increase in revenue allocation to local government decreases economic growth by -0.0332 units. This implies that revenue allocation to local government is non-appropriate for economic growth in Nigeria. Hence efforts should be geared towards efficient and effective utilization of funds at local levels. Thus this findings show that there is a significant relationship between revenue allocation and economic growth (RGDP) in Nigeria.

Finally, the coefficient of the lag values of GDP was correctly signed, showing that a unit increase in the lag values of GDP will lead to improvement in the GDP by 0.0822 units. Also, the error correction factor from the result is correctly signed and passed the test at 5 percent level of significance given that the ECM must be negative and lie between 0 and -1. Thus the ECM will rightly act to correct any deviation of the RGDP from its long run equilibrium position.

SUMMARY

This study has examined the revenue allocation and its effect on economic growth in Nigeria from the period of 1984 to 2015. Principles of fiscal federalism, its challenges as well as the review of the past and current revenue allocation commissions were also examined with the affirmation that the federal government receives the highest share of revenue from the Federation Account. Furthermore, the study attempted to explain the inherent factors affecting economic growth and its influence on the overall development in Nigeria. Revenue allocation to local government has a negative impact on economic growth in Nigeria. The result of the analysis indicates that revenue allocation contributes to economic growth in Nigeria although, in varying proportions implying that the local government contributes negatively to economic growth and federal government allocation did not turn out as expected. It also indicates that revenue allocation, inflation, lending interest rate and past values of GDP contribute to Nigeria's industrial productivity, increased investment level, higher growth, and sustained development.

RECOMMENDATIONS

Based on the review of past and present revenue allocation formulas and the empirical findings obtained in this study, the following recommendations have been made:

1. The current revenue allocation formula should be reviewed and each tier of government should be allocated revenue according to functions they perform. This is to ensure that all levels of government are able to carry out expenditure functions within their jurisdiction and ultimately improve the economic growth in the country. It is however recommended that the state and local governments be given a higher share of the revenue given that they are closer to the citizens in terms of the basic needs of the people and most Nigerians live in the rural areas where basic amenities are lacking.
2. Transparency, accountability and efficiency on the part of all the levels of government should be enshrined to ensure that revenue allocated to specific projects are utilized appropriately.
3. The dependence of the local government on the states and federal government allocation has led to its inability to positively affect the economic growth in the country. This was confirmed by the empirical evidence from the results obtained. Hence the local government alongside the state government should be given autonomy and efforts should be made to boost the internal revenue.
4. The overdependence of Nigeria on oil as a major source of revenue has been a subject of concern, bearing in mind that oil is a tangible resource which can diminish with time and there is global downward slide in oil price. Hence it is recommended that the

government should invest in other sectors of the economy such as the agricultural sector, industrial sector and manufacturing sector in the country, to diversify the nation's revenue base.

5. The government should focus on optimal revenue allocation targeted at economic growth. These would aid to achieve the goals of desired economic expansion and sustained development in the forthcoming years ahead.

CONCLUSIONS

Fiscal Federalism and Revenue allocation in Nigeria both in the pre-independence era and the post-independence era were fraught with controversies. The federal, state and local governments want a sizeable share of the federation account. All the revenue allocation formulae have been geared towards the favor of the federal government, given that they have the highest share of the federation account. However, states and local government have been agitating for higher revenue shares of the federation account.

In this study, the effect of revenue allocation to each tier of government on economic growth in Nigeria was examined. Other variables affecting economic growth such as inflation and lending interest rate as used in the model are said to contribute positively to economic growth hence encouraging investment in capital projects.

It is therefore evident that if revenue allocation to the federating units in the country is used adequately for development and investment purposes, the country's economic growth will improve over time and sustainable development in Nigeria will be achieved in the long run.

SCOPE FOR FURTHER RESEARCH

In view of the fact the oil price volatility and exchange rate variability worsened government revenues and fiscal federalism thereby generating unprecedented shock to Nigerian economy, it is herby recommended that further research be carried out on this subject matter with the scope of finding out the role of fiscal federalism in Nigeria and why the nation is experiencing a classical case of stagflation considering the global slide in oil price and fluctuations in naira exchange rates with other currencies.

REFERENCES

Adedeji, A. (1969). Nigeria Federal Finance: Its Development, problems and prospects. London, England: Hutchinson Educational Conference.

Adeleke S. (2011). Taxation, Revenue Allocation and Fiscal Federalism in Nigeria: Issues, Challenges and Policy Options. Economic Annals, Vol.1, No. 189, Pp. 34-45.

Adelowokan O. (2012). Human Capital Investment and Economic Growth in Nigeria: A Long-Run Path. Pakistan Journal of Social Sciences, Vol.9, Pp. 188-194.

Ahmed I. (2011). Revenue Allocation Formula in Nigeria: Issues and Challenges. A paper presented at the retreat organized for members of the Revenue Mobilization Allocation and Fiscal Commission, Uyo, Akwa-Ibom State. Pp. 3-19.

Aigbokhan B. (1999). Fiscal Federalism and Economic Growth in Nigeria, NES selected paper presented at the 1999 annual conference, Nigeria economic society, Abuja, Nigeria. P. 34

Akinjuobi, E. and Kalu, I.(2009). State Government finances and real asset investment: The Nigerian experience. African Journal of Accounting, Economics, Finance and Banking Research, Vol. 4, P. 9

Akinlo, A. (1999). A cross-sectional analysis of the expenditure responsiveness of states to federal allocations during civilian era in Nigeria. A paper presented at the 1999 annual conference of Nigerian Economic Society, P. 42

Anwar S. (2009). Fiscal Federalism: Principles and practices of Multi-order Governance London, Cambridge University Press

Bernard P. (1975). Modern Public Finance: The Study of Public Sector Economics. 3rd Edition, London, Richard D Irwin Inc, P. 315

CBN (1996). Annual Report on Improving the Revenue Generating Capacity of the three tiers of Government, 31st December, Box 4.1 Pp. 71-73

Dang D. Y.(2013). Revenue Allocation and Economic Development: An Empirical Study. SAGE, P. 2

Domar, E. (1957). Essays in the theory of economic growth, New York, NY: Oxford University Press.

Ekpo H. (2004). Intergovernmental Fiscal Relations: The Nigerian Experience. Paper presented at the 10th year Anniversary of the Financial and Fiscal Commission of South Africa. Cape Town, South Africa. August 10-12.

Friedman J. (1972). Growth Centres in Regional Economic Development,(ed.), N.M Hansen.

Ijaiya, G. (1999). Fiscal Federalism and National Development: A framework for policy analysis. Journal of social sciences and Administration, Vol. 1 No.2 Pp. 78-85

Iyoha M. (2004). Applied Econometrics, 2nd Edition. Nigeria: MINDEX publishing House. Pp. 48-80

Jimoh, A. (2003). Fiscal Policy and Growth in Africa: Fiscal Federalism, Decentralization and incidence of taxation. Paper presented at the Ad-Hoc Expert Group meeting- Economic Commission for Africa, UNCC, Addis, Ababa, Ethiopia. P. 26

Jinghan M. (2005). Economics of Development and Planning, 38th Edition Delhi:VRINDA Publications Ltd. Pp. 22, 39, 217, 229,292.

Likita, O. (1999). Elements of Public Finance, Lagos, Abayomi Industrial Packaging Ltd.

Lukpata, V. (2013). Revenue Allocation Formula in Nigeria: A continuous search. Journal of Public Administration and Management Research Vol. 2, Pp. 32-36

Matrinez-Vazquez, J. & McNab, R.M. (2002). Cross country Evidence on the relationship between Fiscal Decentralization, Inflation and Growth in National Tax Association (ed.), Proceedings of the 94th Annual Conference on Taxation 2001, Washington D.C Pp.42-47

Mbanefoh, G. F. & Egwalkhide F.O (1998). Revenue Allocation in Nigeria: Derivation Principle Revisited in Amuwo, K. Agbaje A.A.B, Suberu R.T and Herault, G. Federalism and Political Restructuring in Nigeria. Ibadan: Spectrum Book Ltd. Pp. 213-231

Musgrave, R., & Musgrave, P. (2004): Public finance in theory and practice (5th edition). New Delhi, India: Tata McGraw-Hill Education Private Limited. P. 262

Ndubuisi, W.C (1996). Practice of Federal Finance: The Nigerian Dimension, Aba Walcom Services Northern Coalition for the protection of Democracy (NCPD)(2002), A communiqué issued at the Conference on Resource control and Supreme Court verdict.

Nwabueze, B.O (1983). Federalism in Nigeria under presidential constitution, London, Sweet and Maxwell Associates

Oates, W. (1999). Fiscal Federalism, Harcourt Brace Jovanovich, Inc. Princeton University Press, P. 13

Ojo, J. (2014): An X-ray of inter-governmental relation conflicts and resource control in the fourth republic in Nigeria. Academic Journal, Vol. 6, No. 3, Pp. 43-52

Okeke, C.C.S. (2004). Nigeria's Fiscal Relations in the 20th Century: an Inquiry into Local Government Fiscal Activities, in: Garba, A.G, F. Egwaiknide and A. Adenikinju (edited), Leading Issues in Macroeconomic Management and Development, Ibadan, Nigeria, Nigeria Economic Society. P. 42

Olofin, S., Olubusoye, O. E., Bello, A. J., Salisu, A. A., & Olalekan, A. S. (2012). Fiscal federalism in Nigeria: A cluster analysis of revenue allocation to states and local government areas, 1999- 2008. CBN Journal of Applied Statistics, Vol. 3, No. 1, Pp. 72-83.

Phillips, A. (1971). Nigeria's Federal financial Experience. The Journal of Modern African Studies Vol. 9, No.3. Pp. 389-408

Prest, A. (1972): Public Finance in Underdeveloped countries. Redwood Press Limited, Trowbridge, Wiltshire. Pp. 14-16

Romer, P. (1994). Origins of endogenous growth Journal of Economic Perspectives, Vol. 8, P. 3-22.

Sharma C. K. (2005a). When does decentralization deliver? The Dilemma of design, South Asian Journal of Socio-political Studies. Vol. 6, No1 Pp. 38-45

Solow, R. (1956). A contribution to the theory of economic growth, Quarterly Journal of Economics, Vol. 70, Pp. 65-94

Stephen, N. & Osagie, E. (1985). A textbook of economics for West African students, Ibadan, Nigeria University Press Limited.

Suberu, R.T (1994). Recent Demands for new States in Nigeria. Nigerian Journal of Federalism, Vol. 2, Pp. 67-82

Usman O. (2011a). Revenue allocation formula and its impact on economic growth process in Nigeria. Journal of Economics and sustainable Development Vol.2, No.3, Pp. 16, 29-37

Usman O. (2011b): Fiscal Federalism and Economic growth process in Nigeria. European Journal of Business and Management, Vol. 3, No. 4, Pp. 1-3

Woller, G.M & Phillips K. (1998). Fiscal Decentralization and LDC Economic Growth: an Empirical investigation. Journal of Development studies 55 Pp.139-148

Yilmaz, S. (2000). The impact of Fiscal Decentralization on Macroeconomic Performance in: National Tax Association (ed.), Proceedings of the 92nd Annual Conference on Taxation 1999, Washington, D.C, Pp. 251-260