

Fiscal Federalism and Framework for Fiscal Policy in Nigeria

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Abstract

Fiscal federalism in Nigeria has not produced the desired impact since its inception in 1946. Despite continuous increase in revenue generation and allocations, the expected impact on economic growth and national development has not been encouraging. This study examines the impact of resource allocation and fiscal balance on economic growth and national development. The multiple regression model was used and various tests were conducted. The analysis shows a negative relationship between Nigeria national development and capital expenditure, and fiscal balance. Only recurrent expenditure has a positive relationship with development. The coefficients of TCE and TFB show a negative impact on economic growth which implies an indirect relationship between GDP and total capital expenditure, and fiscal balance. The Nigerian economy has not been able to save and gainfully invest a correct proportion of her GDP. The fiscal framework in Nigeria has not made significant contribution to economic and national development. The fiscal framework is therefore weak to grow the economy and move the country in the desired direction. We recommend a fiscal framework and system that focuses on fiscal decentralization, such that capital investment in the states and local governments of the federation would be enhanced. The relationship between recurrent expenditure and national development is a potential aspect for further research. However, the recurrent expenditure framework should be reviewed downwards so as to release more funds for capital expenditure to encourage investment in both the private and public sectors of the economy. This study is of immense significance to students, scholars and researchers in Public Policy. Government officials and consultants in fiscal policy would also find the study to be a useful guide.

Keywords: fiscal federalism, resource allocation, expenditure, economy, fiscal balance, framework, economic growth, national development

INTRODUCTION

In recent years, it has been observed that there is a growing concern towards greater fiscal decentralization even by non-federal states. The traditional theory of fiscal federalism lays out a general framework for the assignment of functions to different levels of government and the appropriate fiscal instruments for carrying out these functions. At the most general level, this theory contends that the central government should have the basic responsibility for the macroeconomic stabilization function and for income redistribution in the form of assistance to the poor. In both cases, it is argued that the lower level governments have some basic constraints that would not allow them to perform (Oates, 1999).

In a plural society like Nigeria, federalism is theoretically about equality and equity, justice and fair play amongst both the constituent units and the communal groups that comprise it. It is also about mobilization and utilization of societal resources in a manner that facilitates balanced growth and development. The greater the sense of equity, fairness

and justice in the federation, the more the likelihood of stability, harmonious co-existence and growth within it (Jega, 1996; Musgrave et al, 2004).

In the division of public sector functions and finances among different tiers of government, economics emphasizes the need to focus on the necessity for improving the performance of the public sector and the provision of their services by ensuring a proper alignment of responsibilities and fiscal instruments. While economic analysis, in the theory of fiscal federalism seeks to guide this division by focusing on efficiency and welfare maximization, it should be recognized that the construction of optimal jurisdictional authority in practice goes beyond purely economic considerations. Political considerations, as well as historic events and exigencies, have in practice played major roles in influencing intergovernmental fiscal relations in most federations (Ozo-Eson, 2005).

The imbalance between resource needs and availability of different governments requires the sorting out of one basic issue in a federal system.

And this is the issue of allocation of revenue between different levels of government and among governments at the same level of jurisdiction in Nigeria. The major problems of revenue allocation have revolved around the intra-tier level sharing of federal revenues. The institutional framework for resolving the issue of horizontal or inter-state revenue allocation has been similar to that of dealing with the problem of inter-tier revenue allocation. Based on the premise that the stability and good working of any federation depend critically on the fiscal relations of the constituent governments, the various revenue allocation review bodies have over the years evolved several principles and criteria for sharing revenue among the regions and states of the federation and among the local governments within each state.

Paul Samuelson working on the theory of fiscal federalism provided the framework for what became accepted as the proper role of the state in the economy. Three roles were identified for the government sector within this framework: correcting for various forms of market failure, ensure an equitable distribution of income and seeking to maintain stability in the macro-economy at full employment and stable prices (Ozo-Eson, 2005). The theoretical framework in fiscal federalism was basically a Keynesian one which canvassed for an activist role of the state in economic affairs. This enables the government to make use of a macroeconomic policy known as fiscal policy. The government uses fiscal policy to influence the level of aggregate demand in the economy in an effort to achieve economic objectives of price stability, full employment and economic growth (Ozo-Eson, 2005; Sanni, 2003).

A major challenge for the formulation of a fiscal policy rule in Nigeria is how to involve the sub-national governments. Under current revenue sharing arrangements, the budgets of the state and local governments are heavily affected by oil revenue uncertainty and exhibited substantial cyclical changes. It is in the light of the above, that the current Fiscal Responsibility Bill appears to have some promising provisions towards ensuring a stable and predictable resource transfer between the federal and sub-national governments (Baungard, 2003). In practice, the sub-national governments do not make serious efforts to generate revenue internally, because of their dependence on the allocation from the federally generated revenue. (Khemani, 2001).

On the basis of the foregoing, we ask the following questions: how should we restructure our fiscal federal system in order to reap economic efficiency and stimulate national development? Does theory has something to say on the implications of fiscal autonomy between the central and sub-national governments? How best will a fiscal policy

framework for Nigeria be efficient and effective? This work recognises the role of fiscal policy to fiscal federalism, as well as a fiscal policy framework upon which peculiar issues in Nigeria's fiscal federalism can be duly addressed.

The main objective of this work is to examine the basic relationship between fiscal federalism and economic growth and national development, with a view to establishing the influence of the former on the latter. We hypothesized (H_0) that allocation and fiscal federalism in Nigeria has no strong influence on her economic growth and national development.

This work is structured as follows: After this introduction, is Part II, which is the theoretical framework and literature review. Part III is the methodology; Part IV is data analysis and discussion of results, while Part V is the conclusion.

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Conceptual and Empirical Literature

Federalism is a system of government in which power is divided between a central authority and various constituent units of the country. Usually, a federation has two levels of government: One is the government for the entire country that is usually responsible for a few subjects of common national interest. The others are the governments at the level of provinces or states that look after much of the day-to-day administration of the states. Both levels of governments enjoy their power independent of the other (Rapu, 2006). It is a decentralization of responsibilities for expenditure and revenue to different levels of government that ensures that each level makes decisions and allocates resources according to its own priorities. Therefore, two aspects are crucial for the institution and practice of federalism (Weil, 2008). Governments at different levels should agree to some rules of power sharing. They should also trust that each would abide by its part of the agreement. Fiscal federalism concerns the division of public sector functions and finances among different tiers of government (Ozo-Eson, 2005).

Fiscal federalism, in addition to the fiscal relations between central and lower levels of government, also involves the financial aspects. It covers two interconnected areas. The first is the division of competence in decision making about public expenditures and public revenue between the different levels of government (national, regional and local). The second is the degree of freedom of decision making enjoyed by regional and local authorities in the assessment of local taxes as well as in the determination of their expenditures. The concept of fiscal federalism is not to be confused with fiscal decentralization. Fiscal federalism

constitutes a set of guiding principles, a guiding concept 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 (Kesner-Skreb, 2009).

Salami (2011) identified two types of federalism namely: dual federalism and cooperative federalism. In dual federalism, the constitution created two separate and independent tiers of government with their own clearly defined areas of responsibilities. In such a system, it is inevitable that a certain level of tension and competition would exist. Cooperative federalism, on the other hand, simply refers to making federalism work through cooperation between the various levels of government. It emphasizes the partnership between the different levels of government providing effective public services for the nation. This type of federalism is practiced in the United States of America and Germany (Sanni, 2003)

According to the American Heritage Dictionary (2012), a framework is a structure for supporting or enclosing something else, especially a skeletal support used as the basis for something being constructed. A fiscal policy framework consists of a number of principles upon which fiscal policy is designed. In this context, the framework is a tool to ensure that fiscal policy is transparent and sustainable in the long term. It is a prerequisite for achieving the economic objectives (Ndan, 2007; Swedish Ministry of Finance, 2011).

The doctrine of fiscal policy occupied a position of pre-eminence in the Western world with the “Keynesian Revolution” of the 1930s. Keynes’ doctrine at that time was a challenge to the classical and neo-classical policy of *laissez-faire* (government non-interference) in the economy and its rejection of deficit spending except where government participation in the economy is limited to its traditional roles. Keynes maintained that the government has a more positive role to play in the economy and that it is no sign of profligacy or waste on the part of government to embark on deficit financing (Shah, 1997; Agosto, 2005).

Decisions on fiscal policy are inevitably influenced by political considerations, such as beliefs about the size of the role of governments in the economy or the likely public reaction to a particular course of action (Ndan, 2007; Anyanwu *et al.*, 1995). In Nigeria, the major fiscal policy instruments include changes in taxation rates (on personal income, company income, petroleum profits, capital gains, import duties, export duties, excise duties, as well as mining rents, royalties) and the Nigerian National Petroleum

Corporation (NNPC) earnings and government expenditure (recurrent and capital).

In order to address fiscal issues and ensure greater efficiency in the allocation and management of public expenditure, there arose the need for a commission to preside over these fiscal issues and tackle them effectively. This is yet to be actualized by the Fiscal Responsibility Commission (FRC). The Fiscal Responsibility Commission (FRC) was established by the Fiscal Responsibility Act of 2007. It is independent in the performance of its functions and the provisions of public protection Act as it applies to the members of the Commission in discharge of their functions under the Act (FRC, 2012).

For growing economies or developing countries, one of the challenges is to develop a set of fiscal instruments which will both finance the needs of the government and at the same time, not subdue the economic base on which it depends. It is imperative to know that efficient allocation of resources and management of public expenditure is indispensable for the promotion of intergovernmental relations in any state. Resource allocation is the distribution of resources – usually financial among competing groups of people or programs. The issue of efficient resource allocation has been an unending feature of Nigerian federalism (Adenikinju, 2002). Fiscal federalism has become an integral part of every federal system of government though with peculiar variations in character and scope (Muhammed, 2006).

EMPIRICAL LITERATURE

In a bid to examine empirically whether revenue allocation formula adopted in the past has had any meaningful impact on the economic growth process in Nigeria, Usman (2011), assessed the impact of revenue allocation on economic growth in Nigeria, which was his main objective. This is important in view of the fact that there exists a link between revenue allocation formula and economic growth when one considers the position of government capital formation. The model was formally specified as:

$$GDPR = \alpha_0 + \alpha_1 \text{Pop} + \alpha_2 \text{INV} + \alpha_3 \text{FED} + \alpha_4 \text{STA} + \alpha_5 \text{LOC} + \alpha_6 \text{INF} + \alpha_7 \text{DUM} + \mu_t \quad (1)$$

Where GDPR= Real gross growth rate, Pop = Population growth rate in Nigeria, INV = Gross fixed capital formation/GDP ratio, FED = Growth rate of share of federal government from the federation account, STA = Growth rate of share of rate of state government from the federal account, LOC = Growth rate of shares of local government from the federal account, INF = Inflation rate

DUM = Dummy variable representing political instability, μ_t = Stochastic error: 1 = Political stability, 0 = Political instability. $\alpha_0, \alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6,$ and α_7 were the regression coefficients or impact multipliers estimated. This result shows that there exists a direct relationship between the revenue allocation formula as proxies for the share of federal, state and local government from the federation account and economic growth process in Nigeria. This implies that the revenue allocation formula is a catalyst for economic growth and development. The sign of the variables conform to the a priori expectation which is positive, except for the share of the state that is not statistically significant.

Usman deduced from his findings that the share of local and federal government from the federation account contributes to the economic growth process of Nigeria. Hence, the share of local government must be increased for improved performance. However, the share of the state from the federation account does not perform as expected. Hence, effort should be geared towards effective and efficient utilization of fund at the state level. Effort should also be geared towards increase in investment through expansion in private sector investment.

The main objective of Sorens' study (2008) was to correct the fundamental flaws of previous empirical works as they use spending or revenue decentralization as proxies for fiscal federalism. The main independent variables used are country – level fiscal federalism (population – weighted regional economic - self-rule scores), the number of regional jurisdictions for each country, and an interaction between the two. The dependent variables used in his work are total government share of GDP (consumption plus investment, transfers excluded) and government consumption alone as a percentage of GDP.

Sorens' analysis presents the results of the six regressions. Existing measures of fiscal decentralization do not correlate well with a more robust operationalization of fiscal federalism. Fiscal federalism reduces government consumption share significantly over time, with somewhat weaker effects on government GDP share due to a lack of effect on government investment. Sorens concluded that future empirical research on the effects of fiscal federalism on size of government, economic growth, and regional inequalities should forego the existing fiscal decentralization measure and use broader indicators that take into account all elements of the system as conceived in political economic theory.

Jimoh (2003), sought to determine the optimality or otherwise of how functions are assigned, how the taxing powers to raise resources for the performance

of the assigned functions are shared, and how resources are transferred between (or among) the tiers of government. He examined the effects of the level of decentralization of Nigerian government activities as measured by the number of states, the number of local governments, its expenditure concentration ratio, revenue concentration ratio and fiscal autonomy ratio on the Nigerian aggregate output level and on the prevalence of poverty in the country. This was done by specifying and estimating output and poverty equations respectively. The output equation was given as:

$$RGDP = RGDP(L, K^*, \text{Openness index}, NDR, M_2, \text{POSTAR}, \text{MINDEX}, \text{STATE}, \text{LGA}, \text{FEDEXS}, \text{FEDREVS}, \text{STAUTO}) \quad (2)$$

Jimoh's study on macroeconomic model for Nigeria suggests that its real GDP (RGDP) is a function of labour (L) employed, capital (K*) employed, extent of its openness to the world (Openness index), exchange rate (NDR) – the naira price of a US dollar level of money supply (M_2), the dollar price of its crude oil in the world market (POSTAR) and the extent of malaria prevalence (MINDEX). Other variables which were added are government decentralization measures of number of states (STATE), number of local governments (LGA), expenditure concentration ratio, measured by the share of total federal expenditures in the total expenditures of all tiers of government (FEDEXS), revenue concentration ratio measured by the share of the federal government from the total federally collected revenues (FEDREVS), and fiscal autonomy ratio, measured by the internally generated revenues of states as a percentage of their total expenditures (STAUTO).

The study found that while the assignment of expenditure responsibilities among tiers of government appears to accord with the conventional wisdom on such as well as with the pattern in majority of federal arrangements around the world, revenue collection appears to be concentrated in the hands of federal government and vertical arrangements appear to have left proportionately more than needed at centre and too little for states and local governments. The study suggests 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 thereby resulting in economic growth. Consequently, the study recommends that efforts should be made to increase the revenue allocation powers of lower tiers of government as well as increase their rights to revenues.

Abaniwo (2010), sought to determine the extent to which the allocation of revenue between levels of government could influence and have impact on the

level of economic growth and development in Nigeria. In order to evaluate the impact of resource allocation in economic growth and development, he used an econometric model – multiple regression. He assessed the effect of two or more economic variable(s) on the dependent variable. The dependent variable of his work was Gross Domestic Product (GDP) while the independent variables are total capital expenditure, total recurrent expenditure and total fiscal balance. Thus, the model was expressed as follows:

$$Y = b_0 + b_1 x_1 + b_2 X_2 + b_3 x_3 + \mu \quad (3)$$

Where Y = Gross Domestic Product (GDP), X_1 = Total Capital Expenditure, X_2 = Total Recurrent Expenditure, X_3 = Total Fiscal Balance, μ = Error term, and b_0 , b_1 , b_2 , and b_3 are the regression coefficients to be estimated. He made use of secondary data.

Abaniwo's findings show that although there is a positive relationship between economic growth and development and revenue allocation as confirmed by the priori expectation, the positive relationship is very weak. Thus, federalism has not fully had a positive impact on the socio-economic development of Nigeria. He recommended that the revenue base of the federal, state and local government should be diversified in order to reverse this negative trend. He recommended the need for the Nigerian government to ensure that capital and recurrent expenditures are properly managed in a manner that will raise the nation's production capacity and accelerate growth and development.

THEORETICAL FRAMEWORK

The basic foundations for the initial theory of fiscal federalism were laid by Kenneth Arrow, Richard Musgrave and Paul Samuelson's works on the theory of Public Goods. Arrow discussed the Roles of Public and Private Sectors while Musgrave focused on public finance. These provided the framework for what is accepted as the proper role of the state in the economy. Within this framework, three roles were identified for the government sector namely:-

- i. The role of government in correcting various forms of market failure.
- ii. Ensuring an equitable distribution of income; and
- iii. Seeking to maintain stability in the macro-economy at full employment and stable prices (Ozo-Eson, 2005).

The Keynesian Theory

The Keynesian theory is an economic theory of British economist, John Maynard Keynes (1883 – 1946). The *General Theory's* main emphasis was on diagnosing the ills of the capitalist economy causing chronic deficiency of effective demand and the remedies of the same. (Bhatia, 2007).

Keynes was largely responsible for the creation of modern macroeconomics. The Great Depression occurred between 1929 and 1933 but the classical economists of the time had neither well developed theory that could explain the persistent unemployment nor any policy prescriptions to solve the problem. His theory explained what had happened, what could have been done to prevent the depression, and what could be done to prevent future depressions. The essence of the Keynesian explanation of the Great Depression is based on the simple aggregate demand model, hence the name "demand-side economics".

Keynesians showed that there was insufficient aggregate demand as well as the fact that an active stabilization policy was needed to maintain good economic performance. Consequently fiscal policy was given as the cure for insufficient aggregate demand. To the Keynesians, the private enterprise economy using an intangible money needs to be stabilized, can be stabilized and therefore should be stabilized by appropriate monetary and especially, fiscal policies. Thus, Keynesians advocate detailed intervention to fine-tune the economy in the neighbourhood of full employment and low inflation. Keynesians seek to use discretion in seeking to stimulate the economy in a depression and holding it back in a boom, modifying their policy in the light of current and best available forecast immediate future events. To them, policy changes are best not pre-announced so as to prevent speculation (Ozo-Eson, 2005).

The Harrod-Domar Growth Model

Every economy must save a certain proportion of its national income, if only to replace worn-out or impaired capital goods (building, equipment, and materials). However, in order to grow, new investments representing net additions to the capital stock are necessary. The theory assumed that there is some direct economic relationship between the size of the total capital stock (K) and total GDP (Y). Thus, it follows that any net additions to the capital stock in the form of new investment will bring about corresponding increases in the flow of national output, GDP.

The Harrod-Domar theory of economic growth, states simply that the rate of growth of GDP ($\Delta Y/Y$) is determined jointly by the net national savings ratio, s , and the national capital-output ratio, k . More specifically, it says that in the absence of government, the growth rate of national income will be directly or positively related to the savings ratio (i.e., the more an economy is able to save – and – invest out of a given GDP, the greater the growth of that GDP will be and inversely or negatively related

to the economy's capital output ratio (i.e., the higher k is, the lower the rate of GDP growth will be).

To grow, economies must save and invest a certain proportion of their GDP. The more they can save and invest, the faster they can grow. But the actual rate at which they can grow for any level of saving and investment – how much additional output can be had from an additional unit of investment – can be measured by the inverse of the capital output ratio, k , because this inverse, $1/k$, is simply the output-capital or output-investment ratio. It follows that multiplying the rate of new investment, $s = I/Y$, by its productivity, $1/K$, will give the rate by which national income or GDP will increase (Todaro et al, 2009).

The First Generation Theory and the Second Generation Theory of Fiscal Federalism

The First Generation Theory (FGT) of fiscal federalism was solidly embedded in the view of public finance that prevailed in the 1950s and 1960s. Three major figures played a key role in defining this perspective on the public sector: Kenneth Arrow, Richard Musgrave and Paul Samuelson. These works set forth an active and positive role for the government sector in terms of correcting various forms of market failure, establishing an equitable distribution of income, and stabilizing the macroeconomy at high levels of employment with stable prices (in a basically Keynesian framework).

The FGT thus envisioned a setting in which governments at different levels provided efficient levels of output of public goods for those goods whose spatial pattern of benefits were encompassed by the geographical scope of their jurisdictions. The FGT envisioned a major role for the central government in establishing an equitable distribution of income and maintaining the economy at high levels of employment with price stability. There is clearly some modest scope for decentralized government to play a supporting role in redistributive and macroeconomic policy, but the primary responsibility according to the FGT rests with Central Government. (Oates, 2005).

The Theory of Distribution

Kaldor divided the different theories of distribution into four main groups namely:- (i) the Ricardian Theory of Distribution; (ii) the Marxian Theory of Distribution; (iii) the Neo-Classical or Marginalist Theory of Distribution, which is sub-grouped into (a) Marginal Productivity and (b) the Degree of Monopoly theories and; (iv) the Keynesian or Kaldor's theory of distribution. It is noteworthy that despite the doctrines and theories propounded by Keynes, he never formulated a theory of distribution. The credit of developing the Keynesian Theory of Distribution goes to Kaldor who contends that the principle of the multiplier could be used for the

determination of the relation between prices and wages, given the level of output and employment. But Keynes applied it to the determination of the level of employment, keeping the relation between prices and wages (distribution) as given (Jhingan, 2003; Sorens, 2008).

Once we allow for a multi-level government setting, the role of the state in maximizing social welfare then provides the basic ingredients for theory of fiscal federalism. Each tier of government is then seen as seeking to maximize the social welfare of the citizens within its jurisdiction (Suleimam, 2009; Ugo, 2012). This multi-layered quest becomes very important. Where public goods exist, consumption is not always national in character, but localized.

The basic theory of fiscal federalism cannot be enhanced without fiscal equalization. Fiscal equalization is in the form of lump sum transfers from the central government to decentralized governments (Ekpo, 2004; Ogu, 2011). Fiscal equalization has been important in a number of federations. Canada has an elaborate equalization scheme built into her intergovernmental fiscal arrangements. Thus, the roles of income distribution and stabilization were regarded as suitable for the central government, while the role of government in maximizing social welfare through public goods provision is assigned to sub-national governments (Kalu, 2011; Osakwe, 1999).

METHODOLOGY

We analyzed the impact of resource allocation and fiscal balance on economic growth and national development from a secondary data source. This study used multiple regression models which consist of three independent variables, each of them having its parameters. The main objective of this study is to analyse the impact of macroeconomic management (resource allocation) on economic growth and national development.

The first generation and second generation theories of fiscal federalism, and distribution theory provide the theoretical framework for us. We based our study on the empirical model of Abaniwo (2010) with some modifications.

Model Specification

The functional equation with four variables is given as:

$$GDP = f(TRE, TCE, TFB) \quad (4)$$

Where GDP is the dependent variable; TRE, TCE, and TFB are the independent variables. In relation to this study,

GDP = Gross Domestic Product; TRE = Total Recurrent Expenditure; TCE = Total Capital Expenditure; TFB = Total Fiscal Balance.

In stating the mathematical form of the model, we have:

$$GDP = \alpha_0 + \alpha_1 TRE + \alpha_2 TCE + \alpha_3 TFB \quad (5)$$

Where α_0 , α_1 , α_2 , and α_3 are the regression coefficients or parameters estimated. The econometric form of the model will be:-

$$GDP = \alpha_0 + \alpha_1 TRE + \alpha_2 TCE + \alpha_3 TFB + \mu \quad (6)$$

where μ is the error term which takes care of other independent variables that have not been taken into account in the model.

An estimated form of the econometric model will be

$$GDP = \alpha_0 + \alpha_1 TRE + \alpha_2 TCE + \alpha_3 TFB + \mu \quad (7)$$

where $\alpha_0, \alpha_1, \alpha_2, \alpha_3$ are estimates of the true parameter.

The a priori expectation regarding this study is that economic growth and national development is directly and positively affected by the amount of resources allocated to the federal, state and local tiers of government. This implies that the parameters $\alpha_1, \alpha_2, \alpha_3$ are expected to be positively significant, indicating a positive correlation between the stated independent variables. The value of R^2 lies between 0 and 1. The higher the R^2 , the greater the percentage of the variation of Y explained by the regression plane, or the better the goodness of fit of the regression plane to the sample observation, which implies a positive relationship.

On the other hand, the lower the R^2 , or the closer the R^2 is to zero, the worse the goodness of fit of the regression plane, and would therefore imply a negative relationship between the stated variables.

Variables

A variable is a phenomenon that assumes different values. Variables to be used in this study are:

Gross Domestic Product (GDP): This is the market value of all officially recognized final goods and services produced within a country in a given period, for this study, GDP is the dependent variable because it is related to national accounts and will be determined by the amount of resource allocation made to the different tiers of government.

Recurrent Expenditure: Recurrent expenditure refers mainly to expenditures on operations, wages and salaries, purchase of goods and services, and current grants and subsidies. This definition was put forward by the Australian Bureau of Statistics (ABS). In Nigeria, the Federal Government (FG) recurrent expenditure comprises of services which are subdivided into sectors of the economy. These services

include administration, social and community services, economic services, and transfers such as public debt servicing, pensions and gratuities, contingencies, etc.

Capital Expenditure: According to the Oxford Dictionary of Economics, capital expenditure may be on actually creating new capital goods, but is more usually on buying them from outside suppliers. It also includes the purchase of existing businesses, and of patents and trademarks (Black, 2003).

Capital expenditure is primarily the expenditure on the creation of fixed assets and on the acquisition of land, buildings and intangible assets.

Fiscal Balance: According to the Financial Reporting Guidance, Australia (2012), the fiscal balance is an accrual measure that shows whether the Government has to borrow from financial markets to cover its activities. The purpose of this measure is to meet the central fiscal objective to ensure that the Government, over the economic cycle, is saving enough to cover its own investment needs and not drawing on private sector savings.

For this study, the variables such as total recurrent expenditure (TRE) and total capital expenditure (TCE) are to be listed in order to ascertain the level of economic growth that has taken place as a result of expenditures carried out in all the tiers of government and increase in government revenues. The third independent variable, which is total fiscal balance (TFB) is represented by total federally collected revenues, which is mainly derived from oil revenue and non-oil revenue sources. It is calculated as revenue net of expenses from operations, plus revaluation adjustments, plus net capital investment (net investment in non-financial assets) as such investment is integral to the operation of the Federal Government. We use the Gross Domestic Product (GDP) to measure the rate of economic growth because after the Bretton Woods Conference in 1944, GDP became the main tool for measuring the economy of a country. It is often considered an indicator of a country's standard of living (that is GDP per capita). In this study, economic growth and national development which is represented by GDP is determined by the amount of resources allocated to the three tiers of government (TRE and TCE) and total fiscal balance (TFB) between government expenditure and government revenues.

Data

Data are values of qualitative or quantitative variables, belonging to a set of items. The data to be used in this study is purely secondary data and was sourced from the Central Bank of Nigeria Statistical Bulletin. The scope of the data is 1986 to 2010, covering a period of twenty-five years.

Table 1: Real GDP, Total Recurrent Expenditure, Total Capital Expenditure, and Total Fiscal Balance between 1986 and 2010

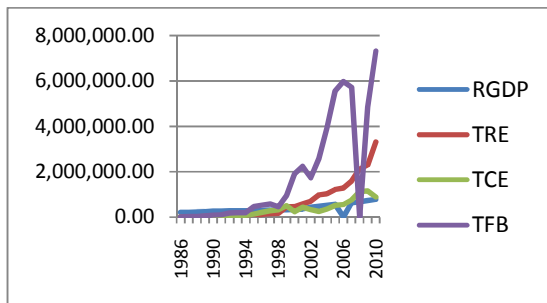
Year	Real Gross Domestic Product (GDP) (₦' m)	Total Recurrent Expenditure (TRE) (₦' m)	Total Capital Expenditure (TCE) (₦' m)	Total Fiscal Balance (TFB) (₦' m)
1986	205,971.44	7,696.90	8,526.80	12,595.80
1987	204,806.54	15,646.20	6,372.50	25,380.60
1988	219,875.63	19,409.40	8,340.10	27,596.70
1989	236,729.58	25,994.20	15,034.10	53,870.40
1990	267,549.99	36,219.60	24,048.60	98,102.40
1991	265,379.14	38,243.50	28,340.90	100,991.60
1992	271,365.52	53,034.10	39,763.30	190,453.20
1993	274,833.29	136,727.10	54,501.80	192,769.40
1994	275,450.56	89,974.90	70,918.30	201,910.80
1995	281,407.40	127,629.80	121,138.30	459,987.30
1996	293,745.38	124,491.30	212,926.30	523,597.00
1997	302,022.48	158,563.50	269,651.70	582,811.10
1998	310,890.05	178,097.80	309,015.60	463,608.80
1999	312,183.48	449,662.40	498,027.60	949,187.90
2000	329,178.74	461,600.00	239,450.90	1,906,159.70
2001	356,994.26	579,300.00	438,696.50	2,231,600.00
2002	433,203.51	696,800.00	321,378.10	1,731,837.50
2003	477,532.98	984,300.00	241,688.30	2,575,095.90
2004	527,576.04	1,032,700.00	351,300.00	3,920,500.00
2005	561,931.39	1,223,700.00	519,500.00	5,547,500.00
2006	595,821.61	1,290,201.90	552,385.80	5,965,101.90
2007	634,251.14	1,589,270.00	759,323.00	5,715,600.00
2008	672,202.55	2,117,362.00	1,123,458.00	7,866,59.10
2009	718,977.33	2,300,194.30	1,152,796.50	4,844,592.45
2010	775,525.70	3,310,343.38	883,874.50	7,303,671.55

Source: Central Bank of Nigeria (CBN) Statistical Bulletin, 2010.

Granger Causality, normality, co-integration and unit root tests were conducted to confirm the behaviour of certain variables in the model.

DATA ANALYSIS AND RESULTS

Data



Source: Authors, 2014

Figure I: Trends in the variables

The trends in the variables show that between 1986 and 1998, the economy seemed to have performed better in terms of fiscal responsibility. The real GDP (RGDP) then was above almost all the variables in this study. However, between 1994 and 2010, total fiscal balance (TFB) rose so high above all variables. It is only total recurrent expenditure (TRE) that started to rise in 1999 and has been rising but below

TFB. RGDP and total capital expenditure (TCE) witnessed unstable and low growth. The astronomical rise in the TFB indicates the inefficiency and skewedness in resource allocation which is in favour

of the Nigerian federal government. From figure I, less is being allocated to capital formation and saving. Since capital formation is a function of saving and investments, this explains the low capital formation in the economy and the low and slow pace in realizing our macroeconomic objectives though the fiscal system.

The Results and Findings

The regression results obtained using Gretl statistical package are summarized below:

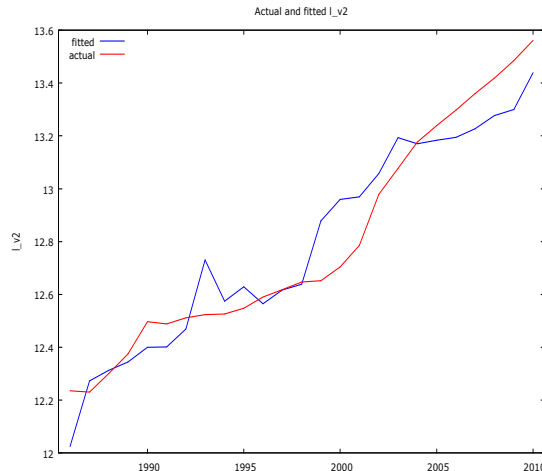
$$RGDP = 10.17 + 0.34TRE - 0.09TCE - 0.04TF \quad (8)$$

(50.46) (5.17) (-1.61) (-0.81)

SE 0.20 0.07 0.06 0.52

$R^2 = 0.908$ $DW = 0.84$

The apriori expectation is fulfilled only for TRE which has a positive sign showing a direct relationship with national development. An increase in recurrent expenditure by N1 increases economic growth by N0.34 or 34 percent. TCE and TFB have negative signs showing negative relationship with national development. An increase in capital expenditure by N1 reduces national development and growth by 9kobo while same change in fiscal balance reduces development by 4kobo. In terms of magnitude, TRE has the greatest influence (positive) followed by TCE and TFB (negative) in that order. Statistically, only TRE again is significant at 5% level. TCE is significant at over 12% while TFB is significant at over 40%. The fitted and actual regression lines are presented in figure II



Source: Authors, 2014
Figure II: Actual and Fitted Regression Line

Judging by the Akaike and Schwarz criteria, our model is properly specified. Accordingly, the low values of these criteria imply that a model is properly specified. The values for the two are less than 1. The three variables in the model accounted for 91 % (R^2) of changes in economic growth and national development. However, the Durbin Watson statistic (DW) indicates a multicollarity problem

Augmented Dickey-Fuller (ADF) Unit Root Test

An augmented Dickey-Fuller test (ADF) is a test for a unit root in a times series sample. For this study, the time series data has been transformed from non-stationary to stationary data. The hypothesis for this test is as shown below:

$H_0: \delta = 0$ (Unit Root)

$H_1: \delta \neq 0$

Decision rule:

If $t^* >$ ADF critical value, do not reject the null hypothesis, i.e unit root exists.

If $t^* <$ ADF critical value, reject null hypothesis, i.e unit root does not exists. Wikipedia (2013)

ADF (GDP)

Since the computed ADF test-statistic for GDP (-3.057166) is lesser than the critical values (-2.6819, -1.9583 and -1.6242) at 1%, 5% and 10% significant levels respectively, we do not reject H_0 , that is, we accept the null hypothesis and conclude that unit root exists at 1%, 5%, and 10% levels of confidence respectively.

ADF (TRE)

Since the computed ADF test-statistic for total recurrent expenditure (-.504109) is lesser than the critical values (-3.7856, -3.0114 and -2.6457) at 1%, 5% and 10% significant levels respectively, we accept H_0 and conclude that there is unit root which exists at all levels of confidence.

ADF (TCE)

Since the computed ADF test-statistic for total capital expenditure (-4.538075) is lesser than the critical values (-3.7856, -3.0114 and -2.6457) at 1%, 5% and 10% significant levels respectively, we accept H_0 and conclude that there is unit root which exists at all levels of confidence.

ADF (TFB)

Since the computed ADF test-statistic for total fiscal balance (-4.770495) is lesser than the critical values (-3.7856, -3.0114 and -2.6457) at 1%, 5% and 10% significant levels respectively, we accept H_0 and conclude that unit root exists at all levels of confidence. In summary, it is observed that the computed ADF test statistic values for GDP, TRE, TCE and TFB series all became stationary at 2nd difference. This shows that resource allocation and fiscal balance has not had significant impact on Nigeria’s economic growth (GDP) and national development.

Cointegration Test

The analysis of long-run relationships has received considerable attention in modern time series analysis (Eviews, 2013). The possible presence of cointegration must be taken into account when choosing a technique to test hypotheses concerning the relationship between two variables having unit roots. (Wikipedia, 2013).

The Cointegration test table shows that:

At none**, the likelihood ratio of 109.5317 is greater than 62.99 at 5% and 70.05 at 1% critical values respectively. Therefore, we reject H_0 and conclude that there is a long run relationship among the dependent variable (GDP) and independent variables (TCE, TRE, and TFB).

At most 1**, the likelihood ratio of 59.03671 is greater than the critical values of 42.44 at 5% and 48.45 at 1% respectively.

At most 2*, the likelihood ratio of 25.65203 is greater than the critical value of 25.32 at 5% but less than the critical value of 30.45 at 1% critical value. There is a relationship amongst the variables at 5% but at 1%, no relationship exists amongst the variables.

At most 3, the likelihood ratio of 10.35969 is less than the critical values of 12.25 at 5% and 16.26 at 1% respectively. This implies that there is no long-run relationship amongst the variables.

The above result for Cointegration test shows that there is a long run relationship that exists between GDP and the independent variables (TCE, TRE, and TFB) only at the none** hypothesized number while at most 3 hypothesized number, there is no long-run relationship between GDP, total capital expenditure, total recurrent expenditure, and total fiscal balance.

Heteroscedasticity

The condition to accept that heteroscedasticity is not present (H_0) in data is that the coefficients of the variables should be zero. Thus, the values of the coefficient, p-values, F statistic and R^2 are not equal to zero. This shows the presence of heteroscedasticity. In addition, the variables: TRE, TCE and TFB vary with national development. This is shown by the variance inflation factors which should have a minimum balance of 1, but the values for the variables in this study is greater than 10 (10.597). There is therefore unequal spread between national development and the variables of study. This implies that national development and policies change with changes in TRE, capital expenditure and fiscal balance. The source of heteroscedasticity in this study is the skewness in the distribution of resources in Nigeria between recurrent, capital expenditures and fiscal balance; and between different levels of government.

THE FINDINGS

The analysis shows a negative relationship between Nigeria national development and capital expenditure, and fiscal balance. Only recurrent expenditure has a positive relationship with development. In addition, the linkage between economic growth/ national development and the independent variables is weak. This implies that the huge capital expenditures and fiscal balance in Nigeria do not translate into real and tangible growth and development of the economy. This points to the fact that the Nigerian fiscal framework and system is weak in growing and developing the economy and the citizens. From our estimates, it is only the coefficient of TRE that has a direct relationship with GDP and which conform to the a priori expectation. This is the case in the Nigerian economy as expenditures on operations, wages and salaries of public office holders and non-governmental workers, etc, have little but positive impact on GDP. The coefficients of TCE and TFB show a negative impact on economic growth which implies an indirect relationship between GDP and total capital expenditure, and fiscal balance. The Nigerian economy has not been able to save and gainfully invest a correct proportion of her GDP. This negates the Harrod-Domar growth model. In addition, monies are not wholly expended by the federal government on capital assets, thereby, making Nigeria a consuming nation (heavily reliant on import) rather than a producing economy.

The negative coefficient of TFB indicates a negative impact of total fiscal balance on Nigeria's GDP. An indication that the Nigerian government rarely engage in self-financing projects but is indebted to other developed economies of the world in achieving her fiscal and macroeconomic objectives. This shows that the federal government has not been able to meet

the central fiscal objective of the economy by saving enough to cover its investment needs rather than drawing on savings from the private sector and foreign reserves.

Both total capital expenditure and total fiscal balance have a negative impact on economic growth. The issue is not the smallness in the amount budgeted for capital expenditure relative to the budgetary allocation for recurrent expenditure but that of fairness and efficiency in the management of what is allocated. The Federal Government gives insufficient funds and attention to investment in projects that can create jobs for the unemployed and sustain the economy. Thus, high recurrent budget at the expense of capital budget has encouraged borrowing to finance overheads rather than capital, which has generated inflation and a heavy debt burden on the Federal Government of Nigeria in recent times. At the moment, Nigeria external debt is said to be in trillions of Naira.

The normality test shows that there is a normality problem in the variables. The variables are not normally distributed, an indication that the Nigerian fiscal system is being abnormally managed. Growth rate Nigeria within the period reduces by 4% and 9% respectively through capital expenditure and fiscal balance. This is an indication that there is no efficiency in resource allocation.

The changes in the various coefficients of TRE, TCE and TFB with respect to GDP (growth and development) showed the presence of significant lags in the adjustment of growth to its desired level. The values of the spread of adjustment for the three variables are 0.66 or 66% (1-0.34) for TRE; 1.09 or 109% (1-(-0.09)) for TCE and 1.04 or 104% for TFB. This means that it will take a longer time to remove the disequilibrium between actual change and desired change in GDP (growth) that is caused by changes in TCE and TFB. The behaviour of capital expenditures and total fiscal balance has serious implications, negative or positive, for the economy. It would take a long time for Nigeria to attain the desired level of growth and development.

CONCLUSION

In this paper, we examine the effect of fiscal federalism, resource allocation on growth and development. We found that fiscal framework in Nigeria has not made significant contribution to economic growth and development. This is consistent with our hypothesis that fiscal structure in Nigeria has no significant effect on growth and development.

The fiscal framework in Nigeria is weak to grow the economy and the country. This is the more reason why fiscal policy in Nigeria is not so effective to take the nation to the (optimum) desired level of growth

and development. Nigeria fiscal federalism and resource allocation reduced economic efficiency through capital expenditure and fiscal balance. Thus, fiscal structure has reduced growth rate in Nigeria by reducing the efficiency of resource allocation rather than inducing more investment and more capital accumulation.

CONTRIBUTION TO KNOWLEDGE

Most studies cited focused on revenue allocation vis-à-vis economic growth. Our own study focused on resource allocation and fiscal balance with particular attention on resource management. We modelled these on economic growth and national development. This is our modest addition to knowledge. We believe this study would benefit a wider reading society, apart from policy makers.

RECOMMENDATIONS

We therefore recommend a fiscal framework that should focus on fiscal decentralization. We believe that such decentralized framework may enhance capital investment in states. The states and local governments are closer to the people and are likely to know the basic needs of the community than the federal government. In addition, a decentralized framework has inherent tendency for community participation and involvement in its developmental aspirations. This kind of framework would also enhance fairness, equity and justice. The absence of these had partly created the present security impasse and insecurity in Nigeria: the Niger Delta, Boko Haram crises, etc. Thus, the principles of justice, equitable and productive fiscal federalism should be entrenched in our desired fiscal framework.

We also recommend a functional and strict monitoring system and budgetary control. Huge sums of funds, in their billions had over the years been allocated and released but the present realities are inconsistent with the huge recurrent and capital appropriations. A budget and project monitoring council should be set up to check all forms of budgetary excesses by ministries, departments and agencies (MDAs). The council must comprise men of integrity without greed for wealth. The practice of supplementary budgets should be stopped.

Since our findings cannot be said to be conclusive, we recommend further research in the areas of (a) the relationship between recurrent expenditure and economic growth, and (b) between fiscal decentralization and investment and growth.

LIMITATION

The research was constrained by time and research personnel. We could not undertake a large scale study on the topic and other related aspects as stated in our recommendation.

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APPENDIX I

Regression Result

Dependent Variable: D(GDP(-1),2)

Method: Least Squares

Date: 09/17/12 Time: 14:43

Sample(adjusted): 1989 2010

Included observations: 22 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2022.050	3614.850	0.559373	0.5828
D(TRE(-1),2)	-0.008255	0.032257	-0.255918	0.8009
D(TCE(-1),2)	-0.018151	0.024130	-0.752221	0.4616
D(TFB(-1),2)	-0.001802	0.003293	-0.547377	0.5908
Adjusted R-squared	-0.016804	S.D. dependent var		16575.58
S.E. of regression	16714.27	Akaike info criterion		22.44888
Sum squared resid	5.03E+09	Schwarz criterion		22.64725
Log likelihood	-242.9377	F-statistic		0.884317
Durbin-Watson stat	2.466798	Prob(F-statistic)		0.467898