



IMPACT OF REVENUE FISCAL DECENTRALIZATION ON CONSUMPTION COST IN NIGERIA

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ABSTRACT: *The paper considers the impact of revenue fiscal decentralization on cost of living in Nigeria using annual time series data that covered a period from 1981-2017. The specific objective is to determine the influence revenue allocations to federal, state, local governments and Niger Delta States derivation have on consumption cost. Ordinary Least Squares (OLS) method was employed to perform the multi-regression analysis with the aid of SPSS version 20. The findings revealed that revenue allocation to the federal government (FAFG) exerts significant negative influence on consumer price index (CPI i.e. proxy for consumption cost). On the contrast, revenue allocations to state (FASG), local governments (FALG) and derivation allowance to the Niger Delta States (DRVN) have significant positive impact on CPI. The study confirms the theory of fiscal decentralization and recommends that more revenue should be allocated to state and local governments, since they are in a better position than the federal government to attend to the needs of the citizenry through delivery of public goods and services at little or no cost.*

KEYWORDS: Revenue, Fiscal Decentralization, Consumption Cost, Consumer Price Index, Nigeria

INTRODUCTION

Fiscal decentralization system is a term that is used to refer to fiscal federalism. In other words, fiscal federalism implies a decentralized fiscal system (Nnamocha, 2002). Fiscal decentralization which is also referred to as devolution of fiscal power from the national (central or federal) government to subnational (lower level) governments, is believed to be part of a reform package to enhance public sector efficiency, attract healthy competition among states and local governments in the area of public service delivery to boost economic growth (Bahl & Linn, 1992; Bird & Wallich 1993).

A thorough review of fiscal federalism practiced in some countries in the world revealed apparent existence of vertical fiscal imbalance in some nations. For instance, in Australia, the state taxing powers are limited while the expenditure responsibilities are enormous. The states and territories have the responsibility of providing health care services, education and other infrastructures while the federal government has the larger revenue sources but transfers funds in form of grants to address the vertical fiscal imbalance (Morris, 2017).

Brazil is another country with vertical fiscal imbalance. Following the pronouncement of Brazil Constitution in 1988, the federal government was given more taxing powers than the municipals. The municipals were left with taxes on services and real estate properties. The tax on service is regressive as people with different income level pay the same tax, while that



of real estate is limited especially in small and poor cities where real estate properties are few in number (Constantino, 2016). Thus, municipals struggle to cope with spending responsibilities.

Argentina is one of the countries with the largest vertical fiscal imbalance due to the mismatch between spending responsibilities and taxing powers (Ter-Minassia, 1997). In Argentina, there is regional inequalities (Sawers, 1996; Porto, 2004), uneven fiscal imbalance followed by over dependence on federal allocations (Ardanaz, Leiras & Tommasi, 2012). All major taxes are assigned to national government; thus, governors and politicians have to lobby around party bosses in order to attract sufficient revenue allocation to their provinces. Revenue allocation in Argentina does not have any justifiable economic bases (Tommasi, Saiegh and Samgiomett. 2001).

There are also countries that practice fiscal federalism that are enviable. The leading examples of a true federalism are the United States of America and India whose major part of their constitution is based on the principles of federalism (Infinite Knowledge, 2016). Germany is also inclusive in this instance. Germany practices a fiscal federalism whereby states revenue and expenditure responsibilities are higher than that of the federal government (Watts & Hobson, 2000; Hepp & Hagen, 2008).

Fiscal federal practice differs among nations in the world. In Nigeria, fiscal decentralization is practiced through revenue allocation to all levels of government which also includes derivation allowance given to the Niger Delta States to compensate them for the caused by oil exploration in their territory. There are also taxing powers for federal, states and local governments as contained in second schedule part 11 of 1999 constitution of federal republic of Nigeria. Second schedule Part 1 of 1999 constitution contains the expenditure responsibilities for the three levels of government in the country. The revenue allocation from the federation account to the three tiers of the government in Nigeria is to encourage adequate provision of public goods and services across states in the federation at no cost or its barest minimum cost. Hence, provision of electricity, transport facilities, health services and education are meant to be adequate and at a low cost following the fiscal decentralization objectives.

Study Objectives

The major objective of the study is to determine the impact of revenue fiscal decentralization on cost of living in Nigeria. Therefore, the study specifically seeks to:

1. Examine the impact of revenue allocation to the federal government (FAFG) on consumer price index (CPI).
2. Investigate the effect of revenue allocation to the state government (FASG) on CPI.
3. Assess the influence of revenue allocation to the local government (FALG) on CPI.
4. Establish the impact of derivation allowance to the Niger Delta States (DRVN) on CPI.

Statement of Hypotheses

H₀₁: FAFG does have significant impact on CPI.

H₀₂: FASG does significantly influence CPI.

H₀₃: FALG does not exert significant influence on CPI.

H₀₄: DRVN does not have significant effect on CPI.



LITERATURE REVIEW

The review of literature is divided into three stages which includes: conceptual review, theoretical review and empirical review.

Conceptual Review

The Concept of Federalism

Federalism is the notion that different regions or states of a country should be able to govern themselves, to some extent. These regions are all governed overall by a central government known as the 'Federal Government'. In a clearer term, federalism is the splitting up of a nation into several states or federations (Light House, 2016). Federalism is a system of government which means dividing a nation into various zones. These zones are usually referred to as states. Federal system of government is where a country is divided up into several different regions, each of which to a certain extent is able to govern itself. Under a federal system of government, each of the self-governing units is accountable to a central authority. By so doing, the whole country is unified under a common constitution or other legal systems, despite being separated out into separate regions. (Infinite Knowledge, 2016). The distinguishing feature of federalism is that legal sovereignty is shared between the federal government and the constituent states (Hague & Harrop, 2001). This implies that a federal constitution provides an avenue whereby different tiers of the government is charged with specific functions. Friedrisch (1937) described federalism as a union of group who are united by one common or more objectives, but retaining their distinctive group beings for other purposes. Perhaps, this is why federal system of government is seen as one that emanates from the desire of the peoples to form a union without necessarily losing their identities. The popular saying of "unity in diversity" is a true reflection of what federalism is all about (Ikeji, 2011). Considering this concept, it is possible to believe that federalism is at the inter group level while association is at inter-personal level. It unites without destroying the personalities or regions that are uniting and is meant to strengthen them in their mutual relations (Nkwede, Nwali, & Orga, 2017). Federalism is a system in which the power to govern is shared between national and state governments creating what is usually referred to as a federation (Akindele & Olaopa, 2002). Federalism has been viewed by Rivlin (1991) as a multilevel government structure, rather than within a level structure of government, for the performance of government functions and service delivery to the people. Each level of government can be viewed as an institution with definite functions to carry out. Federalism is the existence of more than one level of government in one country, each having different expenditure responsibilities and revenue powers (Anam-Ndu, 2007; Nwosu, 2010). According to Sagay (2006), federalism also connotes an arrangement whereby powers within a multi-national country are shared between a federal government and component units in such a way that each unit, including the central authority subsists as a government discretely and autonomously. True federalism therefore should stimulate a faster economic development, unites persons, activate intelligent negotiation and aggravate strong competition in revenue generation (Sam, Eme, & Eme, 2012). From the definitions so far, it is obvious that Federalism is the division of government spending responsibilities and distribution of revenue between the central government and the governments at the lower level.



Fiscal Federalism

Fiscal federalism is concerned with understanding which functions and instruments are best centralized and which are best placed in the sphere of decentralized levels of government (Oates, 1999). Fiscal federalism is referred to as the framework for the assignment of functions and appropriate fiscal instruments to the different levels of government for carrying out these functions (Mbanefo & Egwakhide, 2000). According to Ozo-Eson (2005), fiscal federalism is the division of public sector function and finance among different tiers of government. From Akindele's (2002) point of view, economics stresses that the division has to be undertaken with the need to focus on the necessity for improving the performance of the public sector and the provision of their services by ensuring a parity between responsibilities and fiscal instrument. Akpan (2011) defined fiscal federalism as a set of guiding principles and concepts that aid the designing of financial relations between the national and sub-national levels of government. According to Orji and Jaja (2007), fiscal federalism is the recognition of tax raising powers and expenditure responsibilities between levels of the government. Primarily, fiscal federalism emphasizes on how revenues are raised and allocated to different levels of government for development (Dagwom, 2013). Anyafo (1996) further explained that fiscal federalism is a system of taxation and public expenditure in which revenue-raising powers and control over spending are vested in various levels of government within a nation, ranging from the national government to the smallest unit of local government. It is concerned with the division of public sector functions and finances among different tiers of government (Okolie & Ochei, 2014). It is also seen as an arrangement that involves intergovernmental fiscal relations mostly in contemporary federations (Arowolo, 2011).

The Principles of Fiscal Federalism

The following principles of fiscal federalism have been highlighted by Ikeji (2011) and Kalu (2011).

- Principle of fiscal equalization and access. Every state should have the authority to develop their sources of revenue within their own territory. To ensure a minimum level of public goods and services, some degree of equalization is necessary. This is the consequence of dissimilarity in resource endowment.
- Principle of efficiency and economy. This principle connotes that proficiency must be applied in the distribution of resources. In addition, each government level should maximize its internal revenue earning at a lowest tax effort. The administrative cost should be minimal and there should be absence of frauds and evasion in financial matters.
- Uniformity. The financial system should be such that every government in the system should make available sufficient public service without resorting to higher rates of taxation than other states.
- Accountability and independence principle. The principle of accountability suggests that every level of government should be responsible to their respective legislature. The independence principle implies that respective tiers of government should not only be autonomous in their resources but such resources should be enough to enable them perform their functions independently.

- Adequacy and elasticity. The principle of adequacy means that the resources of the government should be adequate so that each government discharges its obligation while elasticity means the expansion of resources in response to rapidly growing needs and responsibilities of the government concerned.
- The principle of centralized redistribution. This principle states that the reallocation function of fiscal policy through progressive taxation and expenditure programmes should be centralized at the federal level.
- The derivation principle. The component units of a system should be able to control some of its own resources as they desire.
- The principle of diversity. The federal system must have been capable of accommodating a large variety of diversities. Hence, the fiscal system must make room for diversity and differences to supply national, regional and local public goods.
- Minimum provision of essential goods and services. This confirms that fiscal federalism guarantees all citizens, regardless of where they live, the minimum provision of certain basic public goods and services.

Derivation Allowance to the Niger Delta States

The Niger Delta is the delta of the Niger River sitting directly on the Gulf of Guinea on the Atlantic Ocean in Nigeria (Hogan, 2013). Below is the map of Nigeria numerically showing states typically considered as Niger Delta States: 1. Abia 2. Akwa Ibom 3. Bayelsa 4. Cross River 5. Delta 6. Edo 7. Imo 8. Ondo 9. Rivers.

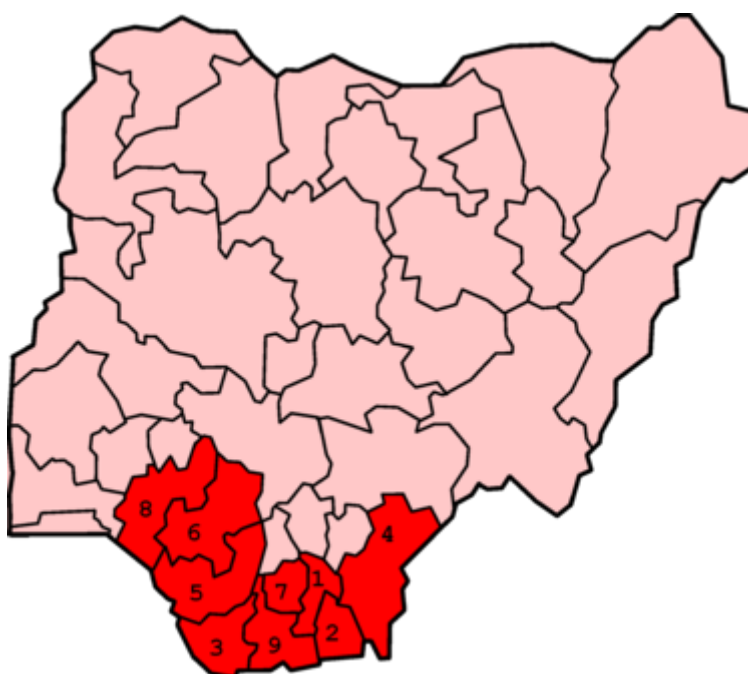


Figure 2.1: Map of Nigeria highlighting Niger Delta States and location

Source: Wikipedia (2017).



Derivation principle denotes that the amount of allocations states should receive from the central pool must commensurate with their percentage contribution to the pool (Abubakar, 1986; Ashwe, 1986; Okunroumu, 1999). The idea behind this principle is that the inhabitants of the area where a particular revenue is being generated must have suffered one form of economic and environmental loss or the other as a result of pollution and other health hazards. Such people deserve compensation as a way of enabling them benefit from the revenue from their area (Abubakar, 1986). This was the argument and practice as far back as the 1950s when revenues from cocoa (in the West) and groundnut (in the North) were contributing so much to the economy of Nigeria (Akinola & Adesopo, 2011). The derivation principle, however, suffered a bastardization, thus leading to a sharp decline from 100 percent in 1953 to 50 percent in 1960, 45 percent in 1975, 1.5 percent in 1982, 1.0 percent in 1990, 3.0 percent in 1992 and the current 13 percent as fixed by section 162(2) of the 1999 Constitution (Anyanwu, 1997; Rapu, 2006; Sagay, 2006).

Revenue Fiscal Decentralization

In the Nigerian context, revenue fiscal decentralization is synonymous with revenue allocation. Therefore, revenue allocation has been referred to as the criteria, process and method of sharing a federation's financial resources among the various tiers of government in the federation in such a peaceful way that guarantees development, progress and enhances unity (NRMAFC, 1992). Onu (1994) defined revenue allocation as the mechanism for the sharing of the country's financial resources among the different tiers of government in the federation, with the overall objective of enhancing economic growth and development, minimizing inter-governmental friction and promoting national unity.

It important to note that revenue allocation to the three tiers of the government is majorly for economic development, which is also known as fiscal federalism (Ekpo, 2004). Economic growth theories maintain that revenue allocation is meant to enhance economic development (Domar, 1946; Harrod, 1939; Romer, 1994; Solow, 1956; Swan, 1956) the revenue allocated to the Nigerian federating units is to carry out their various constitutional expenditure responsibilities that enhance economic development in the country (Dagwom, 2013).

Consumer Price Index

Consumer price index (CPI) measures the price level of all goods and services that are bought by consumers within the economy while GDP deflator measures the price level of all goods and services that are produced within the economy (Quickonomics, 2017). Consumer price index is a measure of changes in the purchasing power of a currency and the rate of inflation. The CPI expresses the current prices of a basket of goods and services in terms of the prices during the same period in a previous year, to show effect of inflation on purchasing power (Business Dictionary, 2017). CPI has been described as a comprehensive measure applied to estimate the price changes of goods and services representing consumption expenditure in an economy (TET, 2017). In Nigeria, CPI measures changes in the prices paid by consumers for a basket of goods and services (Trading Economics, 2017). Those goods and services are broken into eight major groups: food and beverages, housing, apparel, transportation, medical care, recreation, education and communication, other goods and services (Investopedia, 2017).



Theoretical Review

Theoretically, this study is anchored on Fiscal Decentralization Theory (FDT) initially buttressed by Oates in 1972, and later promoted by numerous scholars. Fiscal decentralization also referred to as devolution of fiscal power from the national (central or federal) government to subnational (lower level) governments, is believed to be part of a reform package to enhance public sector efficiency, attract healthy competition among states and local governments in the area of public service delivery to boost economic growth (Bahl & Linn, 1992; Bird & Wallich 1993). It is a system where government structure allows responsibilities, functions and resources to be shared between the higher and the lower government levels. The major aim of decentralizing revenue generation and expenditure responsibilities is to improve the efficiency of the public sector, cut the budget deficit and promote economic growth (Bird, 1993; Bird & Wallich, 1993; Bahl & Linn, 1992; Gramlich, 1993 and Oates, 1993). The argument is that decentralization will increase economic efficiency because local governments are better positioned than the central government to deliver public services that match local preferences and needs which will lead to faster economic development of a country both in the short and long run (Oates, 1972).

Empirical Review

Bodman, Campbell, Heaton, and Hodge (2009) studies the impact of fiscal decentralization on the economy of Australia both at the aggregate and state levels. The focus was not only on economic growth but attention was also drawn on important macroeconomic variables that could influence growth. The lack of co-operation between Australia's Federal and State governments over critical issues, such as health, education and infrastructures was the problem of the study. The states grumbled for insufficient fund to cope with spending responsibilities while the federal government blamed them for being wasteful. The study sought to understand the level of fiscal decentralization and the influence the government structure has on the Australian economy using ordinary least squares regressions, cross sectional analysis and panel estimation techniques. The dependent variables used were the gross state product (GSP) per capita, per capita GDP and inflation. The independent variables were the expenditure and revenue shares. Time series data were collected for all the variables from 1972 to 2005. At the aggregate level, using the expenditure shares, decentralization was discovered to reduce medium term economic growth, there was adverse budget balance and increase in public sector size. Price stability and short-term economic growth were not statistically and significantly affected by decentralization. Revenue decentralization was found to increase medium term economic growth, improve budget balance and price stability, but there was no relationship with the size of the public sector. At the state level, decentralization did not have significant impact on income distribution but weak negative effect was found on economic growth. The study suggested a better and working relationship between the states and the federal in order to improve the economy of Australia.

Faridi (2011) carried out another study on the contribution of fiscal decentralization to economic growth in Pakistan. The study was conducted in Pakistan and in the year 2011. It made use of autoregressive model and covered the period of 1972 to 2009. The ordinary least squares estimation was employed for analysis. As at the time of the study, other factors to measure economic growth in Pakistan were not substantial except fiscal decentralization indicators of revenue and expenditure functions. The dependent variable was the Gross Domestic Product while the independent variables used were the revenues and expenditures of



the government. All variables were expressed in million rupees. The data sources include, Pakistan Economic Survey (various issues), hand book of statistics on Pakistan economy (2005) and fifty years of Pakistan Statistics. The result of the study indicated that both revenue and expenditures of government as measure of fiscal decentralization had positive association with economic growth. The paper also found a positive and significant impact of fiscal decentralization on economic growth. Based on the empirical result, the study suggested that provincial and local level governments should be given more autonomy and authority in fiscal matters in Pakistan.

Yulindra (2012) examined the effect of fiscal decentralization on Local economic growth of Sumatera Barat Province in Indonesia. The problem and importance of devolution of fiscal power from higher level government to the lower level government needed to be evaluated through a research that could establish the effect of fiscal decentralization on economic growth of specific regions in Indonesia. The paper adopted a descriptive research design using Pooled Ordinary Least Squares Method, fixed effect and random effect methods. The study made use of a sample of 15 local regions which consisted of 9 regencies and 6 cities in province of Sumatera Bara. The secondary data which spanned from 2001 to 2010 comprised data on Gross Regional Domestic Product (GRDP), Local government revenues and expenditures, population, employment and education for each city and regency were collected from BPS Statistics Indonesia. However, the data on local government revenues and expenditures at district level are obtained from the Ministry of Finance. The dependent variable was GRDP per capita while controlling variables were the population, employment and education. The results obtained from the analysis indicated a positive relationship between fiscal decentralization and local economic growth in Sumatera Barat. Other determinants of economic growth also showed significant positive influence on local economic growth. The study therefore, provided evidence that fiscal decentralization could enhance economic growth in the local government areas in Indonesia.

Aisyah (2012) examined the impact of fiscal decentralization on economic growth in 19 Provinces covering 180 districts in Indonesia. The focus of the work was to test the effect of decentralization under Law No. 22/1999 and Law No. 25/1999 on economic growth on Municipalities/Regencies in Indonesia after three years of implementation. The problem of local finances triggered the quest for resources management supported by the law and implemented in 2001. The study made use of local government expenditure and general allocation fund which was based on working population and population with higher education as proxy for fiscal decentralization. While the dependent variable is the Regional Gross Domestic Product (RGDP) growth rate. RGDP data were obtained from the book published by BPS Statistics Indonesia, while the local government revenue and expenditure at district level were collected from the Ministry of Finance, Indonesia. The study observed the effect of fiscal decentralization on economic growth both from revenue and expenditure sides. The ratio of revenue allocation to RGDP and the ratio of local expenditure to RGDP were used as proxy for fiscal decentralization. The result of the study revealed that the relationship between fiscal decentralization from both local government expenditure and general allocation fund had a positive effect after three years of implementing the laws though the impact was not very significant and robust.

Baskaran and Hessami (2012) investigated the effect of fiscal decentralization on budgetary stability. The empirical study covered 23 OECD countries. It employed descriptive research design and statistics to establish the consequences of decentralization for budgetary stability



during and in the immediate aftermath of reform periods. The analysis depended on the time series data collected from OECD website for the 23 countries which covered the period of 1975 to 2007. The economic control variables used for the study were per capita GDP growth, inflation rate, gross financial liabilities, population growth, unemployment rate, the ideology of the central government, and the degree of party fractionalization. The analysis summarized the model into two dummy variables. The first was used to depict the state of a country during reform and the second one was used to reflect the effect of decentralization after reform. In the dummy model, the dependent variable was the primary deficit to GDP ratio while decentralization and centralization (during and after reform) served as the independent variables. Ordinary least squares technique was used for the analysis. The analysis established the average deficit to GDP ratio for periods in which countries reform their public sector toward more centralization and decentralization. The result revealed that tax (revenue) decentralization was harmful for budgetary stability both during and in the immediate aftermath of a reform. The expenditure decentralization was found to be harmful also, though the effect was less robust. Tax and expenditure centralization reforms had neutral effect on the primary deficit to GDP ratio. The results suggested that decentralization should be handled with caution and that countries with fiscal challenges should avoid it for better economic performance.

Gemmell, Kneller and Sanz (2013) investigated the effect of spending and revenue fiscal decentralization indicators on economic growth of 23 Organization for Economic Co-operation and Development (OECD) Countries using a panel data from 1972 to 2005. The data which were collected from the National Accounts of OECD Countries Volume IV and IMF Government Finance Statistics Year book represented data on GDP growth for GDP growth (dependent variable), while the independent variables were the investment rate, employment growth and government revenue to GDP. The failure of most centralized governments in developing, led to this study in favour of the widespread debates that fiscal decentralization improves economic performance of a country. The study employed Pooled Mean Group (PMG) estimating equation which allows for varied short-run effects across countries but uniform long-run effects. The result of the study revealed that spending decentralization has lower economic growth while the revenue decentralization resulted in a higher growth. The study recommended that OECD Countries should consider minimizing their spending functions but to ensure that local industries that could improve economic performance are adequately financed.

Oti and Odey (2016) evaluated Nigeria's revenue profile and development mesh. The study thoroughly investigated the extent to which the federally collected revenue, oil revenue, non-oil revenue, federation account and federal government retained revenue affect the Nigerian economy. Time series data gathered covered the period of 1980 – 2014. The statistical tools used for the econometric investigation were Augmented Dickey Fuller (ADF) test, granger causality test, Johansen test and error correction model (ECM). The result showed that total federally collected revenue contributed 0.0009% to the economic growth, oil revenue 0.003%, non-oil revenue 7.6%, federation account 5.59% and federal government retained revenue 0.016%. The Johansen co-integration test confirmed that a long run dynamic equilibrium relationship exists between economic development and various revenue sources and the granger causality result shows that the various revenue sources granger caused economic development in Nigeria. The study suggested among all that non-oil sectors should be encouraged to avoid over reliance on oil revenue for economic development.



Ama and Omodero (2017) studied the Relational analysis of the effect of federation accounts and federal government retained revenue on the Nigerian economic growth. The periods covered were from 1981 – 2015. The study specifically examined the extent to which the federation account and federal government retained revenue affect the economic growth using gross domestic product, education and health services as proxies for dependent variables (economic growth). The statistical tools used for the analysis were multiple regression and t-test to ascertain both collective and individual performance of the variables. The p-value of all the variables tested collectively and individually were $0.000 < 0.5\%$ level of significance. The null hypothesis which suggested that federation account and federal government retained revenue do not affect economic growth in Nigeria was rejected. The implication is that economic development in Nigeria which also includes the provision of goods and services such as education and health largely depends on the federal government retained revenue and revenue allocations from the federation account. This present study is focusing on revenue fiscal decentralization in Nigeria

METHODOLOGY

The study made use of ex-post facto and descriptive research designs. Ex-post facto implies after event, thus, the reason for its adoption is the historical nature of the research data which were all in existence as at the time of this study. The descriptive research design allows numerical collection the data and to statistically evaluate them to arrive at the results which could serve as an empirical evidence in this field of study. All data on Consumer Price Index (dependent variable) were obtained from the International Monetary Fund, International Financial Statistics and data files while data on Derivation allowance to the Niger Delta States were collected from World Bank website, then data on revenue allocation to the federal, state and local governments were gathered from CBN Statistical Bulletin, 2017 edition. All data obtained from various sources were logged to achieve uniformity of data values and to keep them at the same base for easy analysis. The study made use of Augmented Dickey Fuller Unit root testing to establish stationarity of data to avoid spurious regression result. Ordinary Least Squares (OLS) method was used to perform the multi-regression analysis with the aid of SPSS version 20.

The model adopted for the study is specified below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu_i$$

Where:

Y = CPI (Consumer Price Index)

X = Determinant of economic development

X1 = FAFG (Federal Government share of revenue allocation)

X2 = FASG (State Government share of revenue allocation)

X3 = FALG (Local Government share of revenue allocation)

X4 = DRVN (Derivation allowance to the Niger Delta States)

β = Determines the relationship between the independent variable X



And the dependent or Gradient/slope of the regression measuring
The amount of the change in Y associated with a unit change in X.
 μ_i = normally distributed error term.

DATA ANALYSIS AND INTERPRETATION OF RESULT

Table 4.1: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.964 ^a	.929	.920	.240717481	.912

a. Predictors: (Constant), LOGDRVN, LOGFALG, LOGFAFG, LOGFASG

b. Dependent Variable: LOGCPI

Source: Author's Computation, 2018.

From table 4.1, there is existence of strong relationship between the predictor variables and the dependent variable. That is, the R value of 96.4% signifies a strong association between the variables (dependent and explanatory). The R-Square value of 92.9 indicates the extent to which the explanatory variables explains the variations in the dependent variable. Thus, it is only 7.1% that could be attributed to other factors not captured in the model. The Durbin-Watson is approximately 1 which suggests no cause for concern (Field, 2009).

Table 4.2: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	24.374	4	6.094	105.160	.000 ^b
Residual	1.854	32	.058		
Total	26.228	36			

a. Dependent Variable: LOGCPI

b. Predictors: (Constant), LOGDRVN, LOGFALG, LOGFAFG, LOGFASG

Source: Author's Computation, 2018.

Table 4.2 shows the value of F-Statistics which 105.160 with a p-value of $0.000 < 0.05$. This implies that the model is a good fit and statistically significant. The explanatory variables jointly impact positively and significantly on cost of living in Nigeria.



Test of Hypotheses

Table 4.3: COEFFICIENTS

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.452	.322		4.503	.000
LOGFAFG	-1.325	.501	-2.637	-2.645	.013
LOGFASG	1.398	.517	2.698	2.704	.011
LOGFALG	.110	.011	.699	9.820	.000
LOGDRVN	.083	.030	.248	2.731	.010

a. Dependent Variable: LOGCPI

Source: Author's Computation, 2018.

The study earlier hypothesized that FAFG, FASG, FALG and DRVN do not have significant impact on CPI. The set of variables have been tested as depicted on table 4.3, the results revealed that FAFG have significant negative impact on CPI while FASG, FALG and DRVN have significant positive impact on CPI. Thus, Ho1 is accepted while Ho2, Ho3 and Ho4 are rejected. The results of this study are in line with the findings of (Faridi, 2011; Aisyah, 2012; Gammell *et al.*, 2013) but appears to be in contrast with the findings of (Bodman *et al.*, 2009; Baskaran & Hessami, 2012).

CONCLUSION AND RECOMMENDATION

The empirical evidence of this study shows that revenue allocation to the federal government in Nigeria does not influence the cost of living in the country positively. Thus, the result of the study agrees with the concept and theory of fiscal decentralization which was championed by Oates 1972 and promulgated by other scholars like (Bird, 1993; Bird & Wallich, 1993; Bahl & Linn, 1992; Gramlich, 1993; Oates, 1993). This is why Oates (1972) advocates the need for revenue fiscal decentralization because the governments at the lower level are better positioned to provide public goods and services to the citizenry at little or no cost. Therefore, the study recommends a policy that allows more revenue powers and allocation to the state and local governments who are closer to the people and understand their needs and how to meet them. Revenue sharing in Nigeria should more local friendly than federal, this mechanism will help to reduce cost of living in Nigeria.

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REFERENCES

- Abubakar, I. H. (1986). *Public finance and budgeting: principles, practice and Issues with Particular reference to Nigeria*. An unpublished manuscript.
- Aisyah, S. (2012). *The effect of fiscal decentralization on economic growth*. A Research paper Presented to the Graduate School of Development Studies, Institute of Social Studies for the Award of Masters of Arts in Development Studies. Netherlands.
- Akindele, S.T., & Olaopa (2002). Fiscal federalism and local government finance in Nigeria: an Examination of revenue, rights and fiscal jurisdiction in contemporary issues in public administration. *Bolabay publicatons*, pp. 46-64.
- Akinola, S. R., & Adesopo, A. (2011). Derivation principle dilemma and national (dis) unity in Nigeria. A polycentric planning perspective on the Niger Delta. *Journal of sustainable development*, 4(5), 251-263.
- Akpan, G.E. (2011). *Fiscal potentials and dependence in Nigeria in fiscal federalism and Nigeria's economic development*. Selected paper presented at the 1999 annual conference, the Nigerian Economic Society.
- Ama, K.O., & Omodero, C.O. (2017). Relational analysis of the effect of federation accounts and Federal government retained revenue on the Nigerian economic growth (1981-2015). *Developing Country Studies*, 7(3), 104-108.
- Anam-Ndu, E.A. (2007). *Fiscal federalism, resource control and violence in the Niger Delta*. A paper presented at the National Association Seadogs. Town hall meeting held at Eden Hotel Eket.
- Anyafu, A. M. (1996). *Public finance in a developing economy: The Nigerian case*. Enugu, Nigeria: Department of Banking & Finance, University of Nigeria.
- Anyanwu, J. C. (1997). *Nigerian public finance*. First edition. Onitsha, Nigeria: Joance Educational publishers Ltd.
- Ardanaz, M., Leiras, M., & Tommasi, M. (2012). The politics of federalism in Argentina: Implication for governance and accountability. *Inter-American. Development Bank (IDB) working paper series no. IDB-WP-327*.
- Ashwe, C. (1986). *Fiscal federalism in Nigeria*. Research monograph No. 46. Centre for research. On federal financial relations, the Australian National University, Camberra.
- Arowolo, D. (2011). Fiscal federalism in Nigeria: Theory and dimensions. *Afro Asian Journal Of Social Sciences*, 2(22), 1-21.
- Bahl, R.W., & Linn, J. (1992). *Urban public finance in developing countries*. Oxford University Press, New York.
- Baskaran, T., & Hessami, Z. (2012). *Fiscal decentralization and budgetary stability: Transitory effects and long-run equilibria*. JEL classification H1.H7. Retrieved From ec.europa.eu/economy_finance/events on January 8, 2018.
- Bird, R.M. (1993). Threading the fiscal labyrinth: some issues in fiscal decentralization. *National Tax Journal XLVI* (2), 207-227.
- Bird, R.M., & Wallich, C. (1993). *Fiscal decentralization and intergovernmental relations in Transition economies: towards a systematic framework of Analysis*. Country Economics Department working paper, WorldBank, Washington D.C.



- Bodman, P., Campbell, H., Heaton, K., & Hodge, A. (2007). *Fiscal decentralization, Macroeconomic conditions and economic growth in Australia*. Macroeconomic Research Group. MRG@UQ. ISSN1833-4474.
- Business Dictionary (2017). *Consumer Price Index (CPI)*. www.businessdictionary.com/. Retrieved: December, 23.
- Central Bank of Nigeria (2017). CBN Statistical Bulletin. Abuja, Nigeria
- Constantino, C. M. (2016). *Federalism in Brazil: governance and fiscal reforms*. Federalism in Brazil workshop, September, 2016.
- Dagwom, Y. D. (2013). Revenue allocation and economic development in Nigeria: An empirical Study. *SAGE Open*. July-September, 2013. Pp. 1-7.
- Domar, E. (1946). Capital Expansion, Rate of Growth, and Employment. *Econometrica*, 14(2), 137-147. Doi: 10.2307/1905364. JSTOR.
- Ekpo, A. H. (2004). *Intergovernmental fiscal relations: The Nigerian experience*. Paper presented. At the 10th anniversary of the Financial and Fiscal Commission of South Africa, Cape Town International Convention Centre, Cape Town, South Africa, August 10-12.
- Faridi, M.Z. (2011). Contribution of Fiscal Decentralization to Economic Growth: Evidence from Pakistan. *Pakistan Journal of Social Sciences (PJSS)*, 31(1), 1-13.
- Field, A.P. (2009). *Discovering statistics using SPSS: and sex and drugs and rock 'n' roll (3rd Edition)*. London. Sage.
- Friedrich, C. (1937). *Constitutional government and politics*. New York: Harper.
- Gemmell, N., Kneller, R., and Sanz, I. (2013). Fiscal decentralization and economic growth: Spending versus revenue decentralization. *Economic Inquiry*, 51(4), 1915-1931.
- Gramlich, E.M. (1993). A policy-maker's guide to fiscal decentralization. *National Tax Journal XLVI (2)*, 229-235.
- Hague, R., & Harrop, M. (2001). *Comparative government and politics*. Hampshire: Macmillan.
- Harrod, R.F. (1939). An Essay in Dynamic Theory. *The Economic Journal*, 49(193), 14-33. Doi: 10.2307/2225181. JSTOR.
- Hepp, R., & Hagen, J. (2008). *Fiscal federalism in Germany: stabilization and redistribution Before and after reunification*. Fordham University.
- Hogan, C.M. (2013). *Niger Delta*, in M. McGinley (Ed.). Encyclopedia of Earth. Washington D. C. National Council for Science and Environment.
- Ikeji, C.C. (2011). Politics of Revenue Allocation in Nigeria: A reconsideration of some Contending issues. *Sacha Journal of Policy and Strategic Studies*, 1(1), 121-136.
- Infinite Knowledge (2016). *Federalism: meaning, advantages and disadvantages*. Available at: <http://www.importantindia.com/23270/federalism>. Retrieved: July 26, 2017.
- Investopedia (2017). *Consumer Price Index – CPI*. Retrieved: December, 22. <https://www.investopedia.com/>.
- Kalu, I.K. (2011). *Fiscal Federalism in Nigeria: Issues and Practices*. A paper presented at a Seminar by Revenue Mobilization, Fiscal and Allocation Commission held at Calabar in February 14-16.
- Investopedia (2017). *Consumer Price Index – CPI*. Retrieved: December, 22. <https://www.investopedia.com/>.
- Light House (2016). Short paragraph on federalism and its importance. <http://www.importantindia.com/23971/short-paragraph-on-federalism-and-its-Importance/>.



- Mbanefor, G. A., & Egwaikhide, F. E. (2000). *Revenue allocation in Nigeria: Derivation principle Revisited*. In K. A. Amuyo (Ed.), *Federalism and political Restructuring in Nigeria*. (Pp, 213-231). Ibadan, Nigeria: Spectrum Books Limited.
- Morris, A. (2017). *The Commonwealth Grants commission and horizontal fiscal Equalization*. Wikipedia. Retrieved: August 2.
- National Revenue Mobilization, Allocation and Fiscal Commission (1992). *Revenue Allocation. Notes on the role and activities of the NRMAFC*, presented at the National seminar on Revenue mobilization for states and local governments, Enugu April 21-23.
- Nkwede, J.O., Nwali, T.B., & Organ, J. (2017). *Fiscal federalism and challenges of development In Nigeria: a search for remediation*. <https://www.omicsonline.com/open-access/fiscal-federalism-and-challenges-of-development-in-nigeria-a-search-for-remediation-2315-7844-1-126.pdf>.
- Nnamocha, P.N. (2002). *Public finance for a developing economy: The Nigerian Application*. Bon Publisher Owerri, Imo State, Nigeria.
- Nwosu, H.N. (2010). Inter-governmental relations in Nigeria: The increasing dependency of the State Governments on the Federal Government. *Quarterly Journal of Administration*. Abiprint and Pak ltd. Lagos.
- Oates, W.E. (1972). *Fiscal federalism*. New York: Harcourt Brace Jovanovich.
- Oates, W.E. (1993). Fiscal decentralization and economic development. *National Tax Journal XLVI* (2), 237-243.
- Oates, W.E. (1999). An essay on fiscal federalism. *Journal of Economic Literature, JSTOR*, 37(3), 1120-49.
- Okolie, O.R., & Ochei, C.M. (2014). An examination of the Nigerian fiscal federalism and its Impacts on revenue generation for economic development. *IJEEM*, 2(12), 1-20.
- Okunroumu, T. O. (1999). Policy issues in fiscal federalism and Nigeria's economic Development. *Proceedings of the 1999 annual conference of the Nigerian Economic Society*, pp. 453-475.
- Onu, O. (1994). *Federal – state fiscal relation*. In Eliagwu, I.T. et al, (Eds) *federalism and national Building in Nigeria*. Abuja: National Council of Inter-governmental Relations.
- Orji, E.N., & Jaja, P.O. (2007). The dilemma of resource control principle and conflict resolution In Nigeria. *Multi-disciplinary Journal of Research Development*, 9(2), 1-9.
- Oti, P.A., & Odey, F.I. (2016). Nigeria's revenue profile and development mesh. *Research Journal of Finance and Accounting*, 7(19), 58-64.
- Ozo-Eson (2005). *Fiscal federalism: Theory, issues and perspectives*. Daily Independent Newspaper, Thursday September 22.
- Porto, A. (2004). *Disparidades regionales y federalismo fiscal*. La plata, Argentina: Universidad Nacional de la plata, centro de estudios distributivos y sociales (CEDLAS).
- Quickonomics (2017). *Differences between the GDP Deflator and CPI*. <https://quickonomics.com/>. Retrieved: December, 20.
- Rivlin, A. M. (1991). Distinguished lecture on economics in government: strengthening the Economy by rethinking the role of federal and state Governments. *Journal of economics Perspectives*, 5(2), 3-14.
- Romer, P. M. (1994). The origins of Endogenous Growth. *The Journal of Economic Perspectives*, 8(1), 3-22. *JSTOR*
- Sagay, I. E. (2006). *Federalism, the constitution and resource control*. A speech made at a Sensitization programme organized by the Ibori Vanguard on May 19 at the Lagoon Restaurant Lagos.



-
- Sam, U. C, Eme, O. I & Emeh, I. E. J. (2012). Issues in Nigerian fiscal federalism: the relationship Between the principle of derivation and resource control. *Kuwait chapter of Arabian journal of business and management review*, 1(5), January.
- Sawers, L. (1996). *The other Argentina: the interior and National Development*. Boulder, United States and Oxford, United Kingdom: Westview Press.
- Solow, R.M. (1956). A contribution to the theory of economic growth. *Quarterly Journal of Economics*, 70(1), 65-94.
- Swan, T.W. (1956). Economic Growth and Capital Accumulation. *Economic Record* 32:334-61. Doi:10.1111/j.1475-4932.1956.tb00434.x.
- Ter-Minassian, T. (1997). *Fiscal federalism in theory and practice*. Washington, United States:International Monetary Fund (IMF).
- The Economic Times (2017). *Definition of 'Gross Domestic Product'*. *Economictimes. Indiatimes.com*. Retrieved: August 5.
- The Economic Times (2017). *Definition of 'Consumer Price Index'*. <https://economictimes.indiatimes.com>. Retrieved: December, 20.
- Tommasi, M., Saiegh, S., & Sanguinetti, P. (2001). Fiscal federalism in Argentina: Policies, Politics, and institutional reform. *Economia, Spring 2001*. Pp. 147-201.
- Trading Economics (2017). *Nigeria Consumer Price Index (CPI)*. <https://tradingeconomics.com/>.
- Watts, R. L., & Hobson, P. (2000). *Fiscal federalism in Germany*. Queen's University and Acadia University, Canada.
- Yulindra, S. (2012). *The effect of fiscal decentralization on local economic growth in Sumatera Barat Province*. M.A. Degree Research Paper submitted to the Graduate School of Development Studies, Institute of Social Studies, Netherlands.