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Financing State Governments in Nigeria, 1980-2007 (Pp. 204-215)

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Abstract

State governments in Nigeria are saddled with a lot of responsibilities that are geared towards the development of their areas. To do this, they engage in expenditure profiles that are at times overwhelming, especially when compared with their limited financial resources. This problem of insufficient funding sources and over-dependence on external sources was investigated by this study using multiple regression analysis technique. It was found that while Federal allocation, internally-generated revenue and stabilization fund, were significant sources of financing state government expenditure in Nigeria, loans, grants and value added tax were not significant. Therefore, strategies for beefing up and sustaining internal revenue sources were recommended to help states strive towards financial autonomy and attracting grants for their programmes.

Key Words: Financing, State Governments, Financing Sources, Economic Development.

Introduction

Nigeria has three tiers of government guaranteed by the 1999 constitution. They are the federal, states and local governments. These levels of governments are in existence to, among other things, develop the country economically. To do this, these levels of governments try to provide the basic needs of their people within their jurisdictions. This has to be done with funds and the different levels of governments have competed so intensely for such funds that Ovwasa (1995) and Akujuobi (2001) observed that from 1946 when Phillipson commission was set up for the first revenue sharing arrangement, efforts have consistently been made by Nigeria towards having an acceptable formula. Danjuma (1994) also observed that the early history of Nigeria showed the setting-up of six adhoc Revenue Allocation Commissions, namely Philipson Commission (1946), Hicks-Philipson Commission (1951), Chicks Commission (1953), Raisman Commission (1958), Binns Commission (1964) and Dina Commission (1969). Later efforts include Allocation of Revenue Act (1981) and Allocation of Revenue Amendment Act (1984). These efforts have always continued to increase the revenue accruable to the Federal Government at the expense of state and local governments. In line with this, Jimoh (2003) showed that between 1960 and 1999 an average of about 70 percent of federally-collected revenue was allocated to the Federal Government. He went further to show that between 1980 and 1999, about 61 percent of total Nigeria government revenues were allocated to the Federal Government.

Earlier Philips (1980) had observed the fiscal gap when he said that by 1977/78, federal revenues had been growing much faster than those of states and local government. As a result of this, the share of federal revenues going to the state had been declining over the years, whereas by 1960 over 40 percent of federal revenues were transferred to the states. By mid 1970s the proportion had declined to only about 18 percent. Philips (1980) further observes that the declining share of federal revenue going to the states was one of the major causes of fiscal imbalance between the Federal Government on one hand and the state and local governments on the other hand. Sequel to this, lower-level government particularly state governments have continued to complain of insufficient funds to execute the constitutionally assigned duties. There is, therefore, the problem of insufficient finances of the

Nigerian State Governments vis-à-vis their assigned expenditure profiles. The state government operators are complaining that the constitutionally assigned revenue sources do not match what the level of government is supposed to perform.

This study, therefore, has the general objective of evaluating empirically the role of the financing sources of the state Governments in the financing of the total expenditure profiles of the tier of government.

Hypothesis

The analysis is done on the null hypothesis that *the financing sources, namely internally-generated revenue, federation allocation, loans, value added tax and stabilization fund do not significantly impact on the expenditure profiles of Nigerian State governments.*

Significance of the Study

This will be undertaken with a view to finding out areas of dependence and neglect so as to have policy recommendations for the state governments in order to improve funding of their developmental programmes. This paper is divided into four parts. After the introduction in part one, part 2 covers review of related literature. Part 3 empirically evaluates the financing of the expenditure profiles and highlights the findings. Part 4 rounds the paper with recommendations and conclusion.

Review of Literature

To satisfy wants, governments encourage the production of goods and services, distribution of these goods and stabilization of the economy. In modern societies the government (or public sector) and the market (or private sector) allocate resources. If the private sector is making the decisions of allocation, it does this through the forces of supply and demand and price mechanism. It should be noted that this is largely determined by consumer sovereignty and producer profit motives. If however, the public sector is taking the allocation decision, it uses the revenue and expenditure activities of the governments in doing this. It should be pointed out that no economic society uses either solely the market or the government for such decisions. There is always a combination of both the private and public sector in world economies. However, while some tilt more towards government-determined economies, others rely more on private sector.

In addition to the allocation function, distribution and stabilization functions are also performed by the economic system, whether public or private sector. After production of goods and services, they have to be distributed to the people for satisfaction of wants to be achieved. It is only when this is done that production or allocation is said to have been completed. This is the distribution function of economics and it concerns itself with the way in which the effective demand over economic goods is divided among the various individual and family spending units of the society.

The economic function of stabilization is concerned with how the national economy achieves high levels of labour employment and capital utilization under stable prices, a good balance of international payments performance and adequate rate of growth in per capita output over a period of time. These three economic goals of allocation, distribution and stabilization are pursued by national governments through various policies. They are, therefore also said to be the main objectives of any public sector economy.

Historically Adam Smith (1913) justified government intervention on four reasons of national defense, administration of justice, provision of heavy public works, and duty of meeting the expenses necessary for the support of sovereignty of nations. Some modern reasons for government intervention include what Herber (1979) and Musgrave and Musgrave (1982) called production cost conditions, the existence of joint consumption and non-exclusion goods and other imperfect supply conditions that require actions. Also, Keynes (1936) found stabilization conditions like stagflation as requiring intervention. The issue of inadequate economic growth has been shown to also require government intervention. Fischer (1993) for instance, found that a stable macroeconomic environment is conducive to sustained growth. In support of this, Carallo and Mondino (1996) while studying Argentina, found among other things, that macro-economic instability contributed to slow economic growth in the country, especially in its earlier period of economic life. Musgrave (1982) and President of United States of America report (1974) believe that governments should intervene so that those who produce more should be rewarded more and minimum standard of consumption maintained regardless of potential. Furthermore, scholars like Herber (1979), Margolis (1968), Killick (1983), Chambers, Wedel and Rod well (1992) and Broadway (1979) did a lot of work on externality concept and the need for some intervention. Pigou (1920) can be given the credit for pioneering the work on the relationship between externality and public

sector. However, the work was improved upon by Coase (1960), Buchanan and Stubbleline (1962), Davis and Winston (1962), Turvey (1963) and Baumol (1965)

Having confirmed the need for government intervention Akujuobi and Akujuobi (2006) while studying Nigerian situation, are of the opinion that there should be sufficient government decentralization to enable different tiers intervene where they have more advantage of doing so. In addition to this Ashwe (1986) and Jimoh (2003) showed the need to give the different tiers corresponding revenue sources to take care of their responsibilities, while also intensifying efforts to generate enough revenue internally.

Empirical Analysis of the Financing of Expenditure Profiles

Methodology and Data Source

In line with the review of empirical works, the basic variables are total expenditure (TEXP), Federal Statutory Allocation (FEDAC), Internally-Generated Revenue (INREV), Loans (LOANS), Grant (GRAOT), Stabilization Fund (STABF) and Value Added Tax (VAT). The period covered for each of the variables is 1980 to 2007. This is to ensure enough and current data points for econometric analysis.

With the help of Statistical Package for Social Science (SPSS 15.0), the model is estimated using data from 1980 to 2007. The statistics were compiled from various issues of the Central Bank of Nigeria (CBN) Annual Reports and CBN Statistical Bulletin, December 2007 Ordinary Least Squares (OLS) method of multiple regression model was used to test the joint impact and individual contributions of the independent variables to the total expenditure of the state governments.

Data Presentation

The data for the study are as presented on Table 1.

Here f-test was used to test the overall significance of the explanatory variables taken together. Student t-test was used to test for the significance of each explanatory variable contributing to the financing of the state government expenditure profiles in Nigeria because the number of years covered in the research was 28 years, which is below thirty. The co-efficient of multiple determinations (R^2) is used to test goodness of fit of the study.

Model Specification

From the foregoing discussion, the following model is specified in order to evaluate the financing of state government's expenditure profiles. The functional form is given thus:

$$TEXP = f(\text{FEDAC}, \text{INREV}, \text{LOANS}, \text{GRAOT}, \text{STABF}, \text{VAT}, \mu_t) \text{----- (i)}$$

Where;

TEXP	=	Total Expenditure
FEDAC	=	Federal Statutory Allocation
LOANS	=	Loans Internally Generated Revenue
GRAOT	=	Grants
STABF	=	Stabilization Fund
VAT	=	Value Added Tax

Mathematical Form of the Model

The Ordinary Least Squares regression model (Multiple Regression Model) adopted for the study can be mathematically represented as follows:-

$$TEXP = \beta_0 + \beta_1 \text{FEDAC}_t + \beta_2 \text{INREV}_t + \beta_3 \text{LOANS}_t + \beta_4 \text{GRAOT}_t + \beta_5 \text{STABF}_t + \beta_6 \text{VAT}_t + \mu_t$$

Where β_0 = the Intercept parameter, and β_1, \dots, β_6 (Betas) are the regression coefficients or the slope parameters for the various regressors (explanatory variables) stated above.

The term, μ_t otherwise known as the stochastic term to the regression is introduced to represent the random or unexplained variation encountered in the modeling since in real life which we are trying to mimic through this estimation, chance events do occur which would make our model not to be 100% deterministic.

From the analysis in table 2, the regression equation for the total expenditure against all used revenue sources as given below, gives the Nigerian state government financing prediction model of ;

$$\text{Total expenditure} \quad (TEXP = -13384.17 + 965\text{FEDAC}_t + 5.654\text{INREV}_t - 1.510\text{LOANS}_t + 1.124\text{GRAOT}_t + 12.824\text{STABF}_t - 4.668\text{VAT}_t).$$

Analysis of Variance (Anova)

This technique was used to test the significance of the model as a whole. At this point it is very important to test the significance of the regression model as a whole. This was done through the statistical method of analysis of variance (ANOVA) using SPSS 15.0 software. The test of the significance of the regression model is therefore a test of the hypothesis stated below.

Here the null hypothesis (H_0); $B_0 = B_1 = B_2 = B_3 = B_4 = B_5 = B_6 \dots B_K = 0$ where $K = 1 \dots 6$

This means that all the coefficients of the explanatory variables in the regression are zero, which can be interpreted as all state government revenue sources have no significant effect on the total expenditure for the 28 years studied.

Alternative (H_1) is saying that at least one of the explanatory variables (revenue sources) has a significant effect on the dependent variable i.e. $B_0 \neq B_1 \neq B_2 \neq B_3 \neq B_4 \neq B_5 \neq B_6 \dots B_K \neq 0$ where $K = 1 \dots 6$

Decision Rule

If F-statistic calculated from the regression done by the computer is greater than F-statistic tabulated we reject H_0 and conclude that the regression is significant. This means that the independent variables (explanatory) are significant factors for the variation in the dependent variables. From computer workings the F-statistic calculated is 920.661. To make this work meaningful we shall compare this value with values from the table at 1% and 5% levels of significance respectively.

$F_{0.05}(6, 21) = 2.57$; $F_{0.01}(6, 21) = 4.04$

From the values obtained

F- Calculated 920.661 > $F_{0.01}(6, 21)$ 4.04

For 1% level of significance and F- calculated 920.661 > $F_{0.05}(6, 21)$ 2.57 at 5% level of significance.

We therefore accept the alternative hypothesis, which states that the model estimate significantly explains the variation in the dependent variable (Total expenditure) for the various years under study.

Hypotheses Testing

The hypotheses stated earlier were tested and the results shown on table 3 below

Recommendations

From Table 3, it can be seen that while Federal allocation, internally-generated revenue and stabilization funds are significant in the funding of the total expenditure of states in Nigeria at both 5% and 1% levels of significance, loans and grants are insignificant.

Although human wants for money is insatiable, the finding of this research suggests more finances to state governments considering their central role in provision of social amenities to more people. Therefore, the researcher is recommending a new revenue formula for the federation account with state government having up to 35%.

Even though state governments have improved from their situation as captured by Akujuobi and Akujuobi (2007) when it was found that they were not generating enough internally to know that this source makes a significant contribution to their expenditure profiles, efforts should be geared towards generating more revenue internally by doing the following:

- State governments should invest and operate enterprises that can earn streams of regular income so that part of the annual profits of such commercial companies will come into their treasuries.
- They can set up business centers and cinema houses manned by dedicated and honest staff.
- It is strongly recommended that state governments should overhaul their internally generated revenue bases to make them lucrative and incorporating adequate monitoring and control measures to forestall sharp practices of corrupt officials.
- Enough vehicle and revenue staff should be employed and motivated in order to boost the efficiency and the effectiveness of revenue generation.
- Public enlightenment bureau should be constituted at various parts of states to enlighten the public on the need to pay taxes.
- State governments should not be discriminatory in bringing to book fraudulent revenue staff and non-compliant tax payers.

- There should be adequate and constant training and retraining of staff through seminars and workshops in order to reduce ignorance and wastages associated with it.
- The current anti-corruption crusade should be intensified in states and due process of generating and expanding revenue should be religiously implemented.
- It is advisable to states to source for fund at the stock exchange market through municipal bonds. Mbachu (1991) observed that state governments can issue long term debt securities to finance a variety of projects such as markets, mass transit programmes, food storage and even buy shares in reputable companies.
- All state governments should ensure proper prioritization associated with incremental budgeting; ensure proper maintenance of accounting records. State treasury operations should be modernized to be millennium complaint. The much talked about fiscal responsibility act (FRA) being introduced at the national assembly should be allowed to see the light of the day for the benefit of the state governments and other stake holders.
- The governments should restructure the staff disposition of the boards of internal revenue to ensure effective tax collections.
- The policy of not allowing state governments to continue to borrow recklessly has paid off and should be sustained as this is no longer a significant source of finance for state governments. This would help reduce the negative impact of these loans on their economic development, as identified by Akujuobi and Onuorah (2007).
- State governments have been found not to have used much of grants in financing their programmes and this is not encouraging. They should attract internal and external grants for the development of the country and pay their counterpart funding for those that require them.

Conclusion

It is obvious from the study that state governments in Nigeria depend largely on external funding, particularly federal allocation in the funding of their expenditure profile and less on internal sources and grants. This portends danger for them and does not help in their much-desired political autonomy and development.

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Table 1: Federal Capital Territory and States' Revenue and Capital Profile for Period 1980-2007.

	Year	Y TEXP (‘000)	X1 FEDAC (‘000)	X2 INREV (‘000)	X3 LOANS (‘000)	X4 GRAOT (‘000)	X5 STABF (‘000)	X6 VAT (‘000)
1	1980	8951.00	4128.60	1327.70	1221.00	210.20	.00	.00
2	1981	11858.40	3825.60	1049.20	2090.00	152.40	.00	.00
3	1982	10680.50	3245.70	1315.80	1878.00	303.10	.00	.00
4	1983	11090.90	2958.50	1370.90	2389.80	679.40	.00	.00
5	1984	7072.00	2722.00	678.90	1639.10	170.40	.00	.00
6	1985	5857.10	3260.80	1584.10	.00	487.50	.00	.00
7	1986	5588.60	2843.80	1818.00	.00	460.80	.00	.00
8	1987	7346.20	6197.10	1956.40	.00	596.70	.00	.00
9	1988	10778.50	8181.30	2178.80	973.70	.00	.00	.00
10	1989	12974.70	9899.80	1602.30	2064.50	.00	.00	.00
11	1990	18105.50	15943.80	2726.20	2976.30	330.50	.00	.00
12	1991	27023.70	19742.20	3181.20	453.30	1382.00	466.80	.00
13	1992	37060.60	24497.30	5244.70	245.80	957.30	1974.30	.00
14	1993	45833.30	29363.50	7602.30	1845.30	3492.20	1875.00	.00
15	1994	52120.70	29017.50	9900.80	2358.30	4456.60	842.40	5028.70
16	1995	69250.80	38385.20	15405.90	5280.30	2698.70	876.60	6319.70
17	1996	84177.10	41626.40	9602.90	4395.20	16652.30	630.80	11290.00
18	1997	92686.30	50902.50	27368.20	371.80	4337.30	449.30	13905.30
19	1998	143168.8	66067.10	29213.90	4395.20	31477.80	236.90	16206.80
20	1999	167896.1	10357.30	34109.00	4775.10	6551.70	921.60	23750.50
21	2000	359570.6	251570.3	37788.50	3990.90	33289.30	5780.50	30643.80
22	2001	596956.4	404094.0	59416.00	20642.30	58064.60	7060.90	44912.90
23	2002	724537.2	388294.70	89606.90	48331.00	129714.4	6569.70	52632.00
24	2003	921159.7	535129.90	118753.50	85711.30	134179.3	996.80	65887.60
25	2004	1125057	777208.00	134195.30	15510.20	104344.80	2000.00	96185.60
26	2005	1478585	920985.90	122737.60	22557.10	137445.30	10775.30	87449.80
27	2006	1675164	1021888.1	145526.10	23772.30	144563.20	12654.50	102567.30
28	2007	1890719	1402500.2	156558.60	25646.10	152882.40	13457.10	128563.20

Source: Researcher's compilation of CBN Annual reports and Accounts of all the state government in Nigeria for the period 1980-2007.

Table 2: Regression Output of Total Expenditure and the Revenue Sources of State Governments

Independent Variable Total Expenditure	X2 Federal Allocation (Fedac)	X2 Internal Generated Revenue (Inrev)	X3 Loan (Loans)	X4 Grant (Graot)	X5 Stabilization Fund (Stabf)	X6 Value Added (Vat)
Coefficient of the variables	0.965	5.654	-1.510	1.124	12.824	-4.668
Standard Error	.138	1.930	1.089	0.965	4.982	2.865
t-Statistic Calculated	7.005	2.930	-1.387	1.164	2.574	-1.630
Pearson Correlation	0.992	0.975	0.610	0.954	0.891	0.987

CONSTANT B0 = 13384.17
 COEFFICIENT OF DETERMINATION R2 = 0.996
 STANDARD ERROR OF THE ESTIMATE = 39099.79967
 NO OF OBSERVATIONS = 28
 DEGREE OF FREEDOM = (6, 21)

Table 3: Results of Tests.

	FEDERAL ALLOCA (FEDAC)	INTERNAL GENERATED REVENUE (INREV)	LOAN (LOANS)	GRANT (GRAOT)	STABILIZATION FUND (STABF)	VALUE ADDED TAX (VAT)
T-Statistic Calculated	7.005	2.930	1.387	1.164	2.574	1.630
T-Tabulated 2-tailed with DF1 = 0.005 t.005 (6, 21)	2.080	2.080	2.080	2.080	2.080	2.080
DF = 5% = 0.025 t(0.025) (6, 21)	2.831	2.831	2.831	2.831	2.831	2.831
Decision	S	S	NS	NS	S	NS

* S = Significant
 NS = Not Significant