

Impact of State Revenue and Expenditure on Government Budget Performance in Southwest Nigeria

Arogundade, K.K. And Olaoye, F. O.

Faculty of Management Sciences, Ekiti State University, Ado Ekiti, Nigeria.

Abstract: *This study examined the impact of state revenue and expenditure on government budget performance in southwest Nigeria. Specifically the study analyzed the impact of actual as well as budgeted revenue and expenditure on government budget performance. Secondary data sourced from annual budget of six southwestern states for the period of 15 years covering year 2000 -2014. Techniques of analyses employed in the study include pooled OLS panel analysis, fixed effect panel analysis, random effect panel analysis while diagnostic including restricted f-statistics and Hausman test were employed to select the most efficient ad consistent estimation. The result of the analysis revealed that actual revenue, actual expenditure and budgeted revenue exert positive influence on government budget performance in southwestern Nigeria, while the influence of budgeted expenditure is negative. The study therefore concluded that the true influence of state revenue and expenditure on government budget performance is rooted in the actual budget realizations. Thus the study recommended the need for improved revenue and expenditure estimating methods at state level as well as the need to prune the over-bloated size of government expenditure in order to establish realistic state budgets.*

Keywords: *state revenue, state expenditure, budget performance, actual revenue/expenditure*

I. Introduction

Public sector budgeting has metamorphosed from a sheer statement of estimated revenues and expenditures of government sent to the Parliament for scrutiny and approval into a powerful tool being used for diverse purposes ranging from economic, administrative, social and political. (Douglas 2002, Aaron, 1992 and Rubin, 2000). While several studies such as: Douglas, (2002), Faleti and Darrel, (2012), and Olawale and Anthony, (2010) highlighted the purposes of government budget to include: governance, medium of communicating government policy framework, tool to influence economic direction, financial control document and resources' allocation pact. Esu and Inyang (2009) as well as Metawie (2005) and (Olomola, 2012) asserted that performance evaluation and performance indicators are the critical issues about government budget. As observed by Hensen and Van de Stede (2004), the practical or operational purpose of government budget consists of operational planning, performance evaluation, communication of goals and strategy formation. Furthermore, Omolehinwa (2011) and (Olomola, 2012) posited that the specific purpose of public sector budgeting includes: provision of a basis for articulating and working towards the achievement of socio-economic vision of government; the instrument of pursuing the objective of macro-economic growth and development, economic stability and economic equity; basis of allocating resources of government to strategic areas of priorities; a tool to promote managerial efficacy in government and a mechanism for legislative control over the executive. Metawie and Gilman (2005) observed that public sector organisations around the world face pressure to improve service quality and lower their cost, become more accountable, customer focussed and responsive to stakeholders needs. They asserted that for the public sector to attain this enviable height, performance model and practices must be brought to the level of what is obtainable in the private sector. Boland and Fowler (2000) observed that before 1980s and early 1990s performance measure in the public sector was almost an impossibility faced with plethora of challenges. They added that this was informed by the fact that performance measure, performance metrics and evaluation were alien to the public sector.

Government budget in Nigeria has that which could be termed a chequered history and is as old as the colonial rule in Nigeria (Trade Invest Nigeria, 2010, Omopariola, 1991 and Omopariola, 2011). Omolehinwa (2011) affirmed that government budgeting in Nigeria has passed through different stages from the period before 1977, Ministry of Finance Committee to the Onosode Committee of 1984, Phillips Committee of year 2000 and to the provision of the Fiscal Responsibilities Act, 2007. The Nigerian budgeting system was inherited from British colonial administration. Since independence, the Nigerian budgeting experience has been under both the military and the civilian regimes. Under the military, the exact stages of budgeting procedures may not be really defined. The legislative consideration stage is completely absent, as there was no separate legislative arm of government. As military regimes run unitary governments and operate unified fiscal system, the budgetary process is fairly straight forward and less cumbersome. (Obadan, 2003, Omolehinwa, 2001 and Olaoye, 2008). After fifteen years (1983-1998) of military rule, the Nigerian budgeting system came under the

democratic government in May, 1999. The democratic system offers a more complex environment within which decision about the objectives and resource for implementing them take place. The allocation of the public resources is influenced by the interaction of the governmental machinery and the influence of various stakeholders and interest groups that are affected by public expenditure (Mbanefor, 1999). The democratic framework has respect for transparency and accountability in public resource management (Omolehinwa, 2001).

1.2 Statement of problem

According to Olomola (2012) the budget process involves key stages such as budget conception, preparation, approval, execution, monitoring and control as well as budget evaluation. A good budget process must attain three important objectives, namely; (i) maintenance of fiscal discipline especially in terms of realistic expenditure proposals, realistic revenue projections, compliance with budget provisions, compliance with financial regulations (maintenance of strict financial management), timely release of funds and avoidance of undue fiscal imbalances; (ii) attaining allocative efficiency and (iii) attaining operational or technical efficiency. In order to fulfil the specified objectives, the budget must possess the following characteristics: appropriate spending priorities, comprehensiveness, transparency, and timeliness, appropriate balance in recurrent and capital expenditure and proper sequencing. (Olomola, 2012; Omopariola 1999 and 2000 and Osiyemi, 2005) However budget process in Nigeria still falls short of these qualities and the desired objectives are far from being fully achieved. Up to the end of the 20th century, the budget process was bedevilled with monumental imperfections and suffered myriad of abuses including (i) inability of existing medium- long- term plans to provide useful guide to the budgetary process, (ii) lack of political will and commitment to abide by stipulated rules and budget guidelines, (iii) high incidence of extra-budgetary expenditure, (iv) persistently chronic budget deficit, (v) off-budget resource allocation and (vi) overlapping institutional arrangements in the budget process resulting in lopsided allocation of resources and delays in arriving at a consensus on critical decisions (Olomola, 2009; Oyinlola, 1999; Omolehinwa and Naiyeju, 2012 and Olawale and Anthony, 2012). Policy reversals are the order of the day, sometimes leading to extra-budgetary spending or abandonment of projects leading to frustration of stakeholders. Despite the various reforms of the budgetary process since 2000, the defects in the budget process including poor implementation of budget continue unabated. Agagu (2008) and Esu and Inyang, (2009) observed that the public sector which is expected to be a custodian of rules and regulations and the engine of development through its policy and programmes had lost its prestige and confidence. This was based on the premise that the policy instrument, that is budget, has failed woefully and that something needed to be done urgently to salvage the precarious situation. Obasanjo (2003) buttressed the view of other public commentators on the issue of failure of public sector budgeting. It was added that budget process is fraught with inefficiency and endemic corruption. Thus this study examined the impact of state revenue and expenditure on government budget performance in southwestern states in Nigeria. The specific objectives of the study include to

1. Analyze the impact of actual revenue and expenditure on government budget performance in southwestern states
2. Examine the influence of budgeted revenue and expenditure on government budget performance in southwestern states

II. Literature Review

2.1 Concept of Government Revenue

Government need to perform various functions in the field of political, social and economic activities to maximize social and economic welfare. In order to perform these duties and functions, government require large amount of resources. These resources are Government Revenue. The term revenue has been defined by various authors in different ways (Hamid 2008; Adam 2006; Bhatia 2001; Pearce 2002; Osagie 2008), as fund required by the government to finance its activities. It is used to be the total amount of income accruing to a state/city/country from various sources within a specified period of time. It is the money received by a government. It is an important tool of the fiscal policy of the government and is the opposite factor of government expenditures. Revenues earned by the government are received from sources such as taxes levied on the incomes and wealth accumulation of individuals and corporations and on the goods and services produced, exports and imports, non-taxable sources such as government owned corporations' incomes, central bank revenue and capital receipts in the form of external loans and debts from International Financial Institutions (Bariyama, 2009).

2.2 Concept of Government Expenditure

Government Expenditure no doubt is an important instrument for a government to control the economy of a nation. Economists have been well aware of the effects in promoting economic development. Anyway, the general view is that government expenditure notably on social and economic infrastructure can be growth

enhancing although the financing of such expenditure to provide essential infrastructural facilities including transport, electricity, telecommunication, water and sanitation, waste disposal, education and health can be growth retarding (Olukayode, 2009). Government expenditure involves all the expenses which the public sector incurs for its maintenance for the benefit of the economy. Generally, government expenditure in Nigeria can be categorised into two component parts namely capital expenditure and recurrent expenditure. Capital expenditure is incurred on the creation or acquisition of fixed assets (new or second-hand) while recurrent expenditure is incurred on the purchase of goods and services, payment of wages and salaries and settlement of depreciation on fixed assets. Increase in government expenditure on socio-economic activities and infrastructural development is an impetus for economic growth in any country.

2.4 Theoretical Review

This study is hinged on theories of government expenditure and budgeting such as Adolph Wagner theory, performance based budgeting theory, and theory of comparative budgeting

(a) Adolph Wagner theory

In the 19th century a German economist, Wagner (1883), formulated a “Law of expanding state expenditures”, and the main point of his work is the growing importance of government activity and expenditure as an inevitable feature of a “progressive” state. A modern formulation of Wagner’s “law” as proposed by Bird (1971) might run as follows: as per capita income rises in industrializing nations, their public sectors will grow in relative importance. Wagner included in the work three reasons why the development of public spending will take place. Firstly, an expansion of state expenditures would come about with respect to the administrative and protective functions of the state. His explanation based on substitution of public for private activity. After some years, new factors have been added, such as the increase in population density and urbanization, consequently that leads to increased state (public) expenditures and on economic regulation. Secondly, the study predicted a considerable relative expansion of “cultural and welfare” expenditures (especially redistribution of income and education). The study assumed that these goods are “luxury goods”, hence, the income elasticity of demand is greater than unity. Finally, Wagner claimed that the inevitable changes in technology and investment required in many activities would generate an increasing number of private monopolies. This effect would have to be offset, or the monopolies taken over, by the state interests of economic efficiency (his main example was the railroad). Wagner in his original study also recognised that the state expansion has some limits. The study mentioned that the proportion between government spending and national income may not be permanently overstepped. Hence, this suggests that there must be some sort of balance in the individual’s outlays for the satisfaction of various needs.

(b) Performance-based budgeting Theory.

The theory is attributed to the innovations brought into public sector budgeting by Osborne and Gaebler in 1992. By way of definition performance-based budget can be described as a budgeting system that reflects the input of resources and the output of services for each unit of an organization. This type of budget is commonly used by the government to show the link between the funds provided to the public and the outcome of these services. Decisions made on these types of budgets focus more on outputs or outcomes of services than on decisions made based on inputs. In other words, allocation of funds and resources are based on their measurable potential results. The theory indicated a five-point measure of budget which includes output, activity, outcomes, effectiveness and efficiency. In practical terms the use of monetary values of government activities in terms of costs and revenues are recommended as the best measure budget performance. Such performance metrics includes revenues, expenditure, allocation of fund to capital projects, funding of budget from internal sources, physical output of projects and the like. (Omolehinwa, 2001; Omolehinwa and Naiyeju, 2011; Greg, 2001 and Young, 2003).

(c) Theory of Comparative Budgeting

As noted by Savage (1993), the theory tries to explain and find a theoretical footing for budget as a tool of financial management. That is, there should be a comparative budget system between or among related users. A nation can compare its budget policies with that of other nations. Corporate establishment can compare its budget policies and strategies with that of other related firms or segments of the same conglomerate. This in essence would lead to exchange of ideas and ideals, and budget effective as a tool of financial management will evolve.

2.5 Empirical Review

Alesina, *et al.* (1999) also investigated budget institutions and fiscal performance in Latin America. The goal of the paper was to explain cross country differences in fiscal positions by focusing upon the

procedures which lead to the formulation, approval and implementation of the budget. They considered a sample of almost all the Latin American countries and constructed an index of budget procedures on a hierarchical-collegial dimension, and on a transparent one. The study used both the written legislation and a survey conducted by means of questionnaires answered by the subject director's office of each country. Indices were constructed from the data collected upon 10 characteristics of the budget procedures. In each question, for each year of the sample, countries were assigned a score between 0 and 10 according to their answers, 10 for the case of the answer that was considered was the most "hierarchical" and 0 for the most "collegial" answers. Specifically, the study found that for a sample from 1980 to 1992, stringent budget laws on deficit influences fiscal outcomes and more hierarchical procedures are associated with lower primary deficits in Latin America. They also concluded that transparent procedures in budget processes are associated with lower primary deficits. The results were based on correlations and regressions between the various aggregated indices of budget procedures and fiscal policy measures in Latin America, after controlling for several economic determinant of the government budget.

Furthermore, shedding light on the effect of budget Procedures on outcome, Poterba *et al* (1999) focused on fiscal shocks, namely the difference between planned and actual spending and revenues, due to a variety of unexpected random events. Poterba *et al* (1999) said that while many states cannot plan to run deficits, unexpected deficits as a result of fiscal shocks can and do materialise. The research studied whether the different degrees of stringency of budget balance provisions affect the reaction of states to fiscal shocks. He found that states with weak ant deficit rules adjust spending less in response to positive deficit shocks than their counterparts with strict ant deficit laws. More generally, Poterba *et al* (1999) concluded that fiscal institutions affect the short-run patterns of taxes and expenditures. The research also found that adjustments to adverse fiscal shocks are less vigorous and prompt in states with divided government, where the governor does not belong to the party that holds a majority in the legislative. Alt and Lowry (1994) also found support for Poterba's conclusions. Though, using a different approach and sample, they found that adjustments to fiscal imbalances are low in states with divided government and weak ant deficit rules.

Alesina and Robert (1997) also investigated whether the budget performance have significant macroeconomic effects on the size and composition of the budget and on the budget balance. Their paper focuses mostly on the formulation of a budget proposal within the executive and the presentation and approval of the budget in the legislature. Two issues were crucial to them. They are voting procedures leading to the formulation and approval of the budget and the degree of transparency of the budget. They focused upon a key-trade-off between two types of institutions: hierarchical and collegial. They concluded that hierarchical institutions are more likely to enforce fiscal restraint, avoid large and persistent deficits, and implement fiscal adjustments more promptly. On the other hand, they are less respectful of the rights of the minority, and more likely to generate budgets heavily tilted in favour of the interests of the majority. They also concluded that collegial institutions have the opposite features.

Bleaney (2010) wrote on budget institutions and fiscal performance in Africa. He examined the relationship between budget institutions and fiscal performance in 46 African countries, made up of 45 countries of AU members and Morocco. The paper analyzed African budgetary system in isolation given that the regions comparatively high vulnerability to external shocks, large extent of external influence, underdeveloped financial markets, and weak state structures and political systems render the fiscal position of African countries generally more fragile than that of other developing countries. The objectives of this paper were to propose an index which allows for the assessment of the adequacy of budget institution in the specific context of African countries and analysed their impact on fiscal outcomes. The author constructed an Africa-specific budget institution index. He provided a framework for a two-dimensional analysis across budgetary phases and across categories. He distinguished between three phases of the budget process. At each of the three budgetary phases, the index captured five categories, evaluating different aspects of the quality of budget institutions. The categories included centralisation, rules and controls, sustainability and credibility, comprehensiveness, and transparency. Each category is made up of several individual criteria, about 34 in total, both fiscal and procedural rules. While the former were measured by criterion on the existence of numerical fiscal rules, the latter were captured by several criteria. In the scoring of the index, each category was attributed a maximum score of 1 and each of the variables was given an equal weight. Moreover, the overall index was scaled to range between 0 and 1, while the highest score reflected better performance. It was found that there are indeed big differences in the quality of budgetary institutions on the continent. Give the correlation and regression results, it was found that sound budget institutions are associated with lower public external debt levels and less significantly, a higher primary budget balance.

Wehner (2009) also examined budget practices and procedures in Africa. He examined the budget practices and procedures of about twenty-five African countries, including Nigeria. Timeliness in the formulation, approval, execution and audit and evaluation was examined. The role of the executive and the legislatures, fiscal transparency, off-budget spending and Aid management were also examined. He linked the

survey results to administrative traditions, reform efforts and political and economic realities. He mentioned areas of transparency and off-budget spending, budget execution and audit procedures and Aid management as areas that need attention

Omopariola (1984) and (1991) did a survey of Federal government budget performance between 1985 and 1989 and discovered that there is a wide gap between budget estimates and actual performance. The research finds out revenue and expenditure variances lies between 74.05% and 275.71%. This was attributed to poor skill of estimation, economic depression and lack of sound accountability structure. The same disparity was discovered for Lagos and Ogun States for the same period by Omopariola (1991). The findings of Omolehinwa (2001) are not anything different from the findings of Omopariola (1999) as far back as 1984 and 1991. Omolehinwa (2001) reported that there was a disparity of between 26% and 180.8% within 1970 to 1994 in capital budget approved estimates and actual implementation.

Obadan (2003) also examined the budget process and budgeting experience in Nigeria. Specific issues such as objectives and significance of government budget, the budget process, features of past budgeting experience including the issue of operation and maintenance expenditure, budgets in relation to fiscal disciplines and macroeconomic stability, and international experiences of fiscal frameworks for fiscal prudence were thoroughly examined. He pointed out the basic objectives of government budget as to relate expenditure decisions to specific policy objectives, and to existing and future resources; relate all major decisions to the state of the national economy; ensure efficiency and effectiveness in the implementation of public sector programmes and facilitate legislative control over the various phases of the budgeting process

III. Methodology

In the quest to attain the objectives predetermined in the research work, the study employed panel data analyses including pooled OLS regression analysis, fixed and random effect panel analysis, alongside diagnostic test such as restricted f-test and Hausman test on secondary data sourced from the annual budget of the six southwestern states over a period of 15 years (2000-2014). However following the work of Olomola (2012), the research model identified two separate performance indicators as the dependent variables, from the purviews of resources mobilisation and allocation capacity of the selected states. The first model used the Ratio of Internally Generated Revenue to Total Revenue herein after denoted as (IGR/TR) while the second model used the Ratio of Capital Expenditure to Total Expenditure, denoted as (CE/TE). Exogenous variables used in the models include Total revenue (TR) actual and budgeted, Total Expenditure (TE) actual and budgeted and statutory allocation (STA)

Model Specification:

$$IGR/TR_{it} = \alpha_0 + \alpha_1 TRB_{it} + \alpha_2 TRA_{it} + \alpha_3 TEB_{it} + \alpha_4 TEA_{it} + \alpha_5 STA_{it} + U \dots (I)$$

$$CE/TE_{it} = \beta_0 + \beta_1 TRB_{it} + \beta_2 TRA_{it} + \beta_3 TEB_{it} + \beta_4 TEA_{it} + \beta_5 STA_{it} + U \dots (II)$$

i = cross-sectional variable from 1,2, 3,..... 6

t = time series variable form 1, 2, 3, 15

$\alpha_0, \dots, \alpha_5, \beta_0, \dots, \beta_5$ are parameter estimates corresponding to the explanatory variable and the constant terms for model 1 and 2 respectively.

IV. Results And Discussion

4.1 Pooled OLS Estimation

Pooled OLS estimator is the most restrictive panel data estimation technique, which assumes that the regression coefficients and constant estimates are the same for all cross sectional subject, over time. Therefore the model does not take cognizance of the possible heterogeneity/uniqueness in cross sectional units and/or over time periods.

Table 4.1 Pooled OLS Parameter Estimates (Model 1)

Series: IGR/TR TRB TRA TEB TEA STA

Variable	Coefficient	Standard Error	T-Test Values	Probability
C	0.1341356	0.0193092	6.95	0.000
TRB	1.02e-06	4.21e-07	2.42	0.018*
TRA	8.58e-08	3.01e-07	0.28	0.777
TEB	-1.33e-06	5.41e-07	-2.46	0.016*
TEA	1.52e-06	4.40e-07	3.45	0.001*
STA	1.23e-08	6.91e-07	0.02	0.986

R-square= 0.4800

Adjusted R-square= 0.4490

F-statistics= 15.51

Prob(F-stat)= 0.0000

Table 4.2 Pooled OLS Parameter Estimates (Model 2)

Series: CE/TE TRB TRA TEB TEA STA

Variable	Coefficient	Standard Error	T-Test Values	Probability
C	.3297471	.0202671	16.27	0.000
TRB	3.23e-07	4.42e-07	0.73	0.468
TRA	3.20e-07	3.16e-07	1.01	0.315
TEB	-3.97e-07	5.68e-07	-0.70	0.486
TEA	4.66e-07	4.61e-07	1.01	0.315
STA	-3.47e-07	7.25e-07	-0.48	0.633

R-square= 0.2203

Adjusted R-square= 0.1739

F-statistics= 4.75

Prob(F-stat)= 0.0007

The pooled OLS estimation result presented in table 4.1 revealed the impact of explanatory variables such as total revenue budgeted (TRB), total revenue actual (TRA), total expenditure budgeted (TRB), total expenditure actual (TEA) and statutory allocation on the ratio of internally generated revenue to total revenue (a measure of government budget performance). The result revealed that total revenue budgeted (TRB), total revenue actual (TRA), and total expenditure actual (TEA), and statutory allocation (STA) exert positive impact on the performance of southwestern states as measured by the ratio of internally generated revenue to total revenue (IGR/TR), while total expenditure budgeted influences the measure of government budget performance in southwestern state negatively. The observed impact of total revenue budgeted, total revenue actual, total expenditure actual and statutory allocation on government budget performance agree with the a-priori expectation while the reported influence of total expenditure budgeted contradicts the a-priori expectation. Table 4.1 revealed that among others total revenue budgeted, total expenditure budgeted and total expenditure actual significantly influence the government budget performance of southwestern states (as measured by the IGR/TR). The pooled OLS estimation result presented in table 4.1 revealed an R-square value of 48 percent and F-statistics probability value of 0.000, which implies that about 48 percent of the systematic variation in the ratio of internally generated revenue to total revenue (IGR/TR) can be explained by variation in total revenue budgeted, total revenue actual, total expenditure budgeted, total expenditure actual and statutory allocation, combined and that all the included variables jointly and significantly influence the budget performance in southwestern state.

Table 4.2 presents the pooled OLS estimation result relating the likes of stimulus variables (TRB, TRA, TEB, TEA, STA) to the response variables CE/TE (a measure of budget performance), the result revealed that all the explanatory variables except total expenditure budgeted (TEB) and Statutory allocation (STA) positively influence government budget performance as measured by the ratio of capital expenditure to total expenditure in this respect. Table 4.2 reveals that if all the explanatory variables are held constant i.e total revenue budgeted, total revenue actual, total expenditure budgeted, total expenditure actual and statutory allocation assume zero value, budget performance measured as a ratio of capital expenditure to total expenditure will assume an average value of 0.3297471 and that the performance will be significant. Table 4.2 evidently show that though all the explanatory variables jointly and significantly influence budget performance given the probability of F-statistics that is less the 0.05, No variable solely exert significant impact on government budget performance measured in expenditure terms ratio of capital expenditure to total expenditure (CE/TE)

4.2 Fixed Effect Estimation

Fixed effect model takes cognizance of the heterogeneity/uniqueness that may exist across subject unit, as such the model include fixed effect for each of the cross sectional unit specific period. The inclusion of the fixed effect is to identify the effect of some variables (not included in the model) such as political structure, political ideology, policies and reforms, administrative styles, state bureaucracy, geographical location, availability of natural resources e.t.c on government budget performance, thus subsuming the likes of the aforementioned variables into the intercept term for each of the state and/or period, in an attempt to trace the subject and period specific uniqueness.

Table 4.3 Fixed Effect Parameter Estimate (Cross Sectional Specific) model 1

Series: IGR/TR TRB TRA TEB TEA STA

Variable	Coefficient	Standard Error	T-Test Values	Probability
C	.0844532	.0202179	4.18	0.000*
TRB	4.63e-07	2.85e-07	1.62	0.109
TRA	4.80e-08	1.98e-07	0.24	0.809
TEB	-3.79e-07	3.74e-07	-1.01	0.314
TEA	2.27e-07	3.06e-07	0.74	0.460

STA	1.76e-07	4.58e-07	0.38	0.702
FIXED EFFECTS				
LAGOS	.3213109	.03301	9.73	0.000*
OGUN	.1258875	.0259703	4.85	0.000*
ONDO	-.0308815	.0273027	-1.13	0.261
OSUN	.0532214	.0256297	2.08	0.041*
OYO	.0964511	.02766	3.49	0.001*

R-square= 0.8086
 Adjusted R-square= 0.7844
 F-statistics= 33.37
 Prob(F-stat)= 0.0000

Table 4.4 Fixed Effect Parameter Estimate (Cross Sectional Specific) model 2
 Series: CE/TE TRB TRA TEB TEA STA

Variable	Coefficient	Standard Error	T-Test Values	Probability
C	.3470862	.030874	11.24	0.000*
TRB	6.38e-07	4.35e-07	1.47	0.147
TRA	4.28e-07	3.02e-07	1.42	0.160
TEB	-1.03e-06	5.71e-07	-1.80	0.076
TEA	1.16e-06	4.67e-07	2.49	0.015*
STA	-1.90e-07	6.99e-07	-0.27	0.787
FIXED EFFECTS				
LAGOS	-.1597971	.0504082	-3.17	0.002*
OGUN	.0168424	.0396582	0.42	0.672
ONDO	.032787	.0416928	0.79	0.434
OSUN	-.0705442	.0391381	-1.80	0.075
OYO	-.0772922	.0422384	-1.83	0.071*

R-square= 0.3926
 Adjusted R-square= 0.3157
 F-statistics= 5.11
 Prob(F-stat)= 0.0000

The result of fixed effect (cross sectional specific) estimation presented in table 4.3, table 4.4 and for model 1, and 2 respectively reveal the coefficient of each explanatory variable, alongside the intercept term (heterogeneity term) corresponding to each state. Observably the coefficient estimates presented in table 4.3 and table 4.4 for models 1 and 2 respectively tend to be identical to the result of the pooled OLS estimates presented in tables 4.1 and 4.2. However, considering the cross sectional fixed effect, using Ekiti state as the based/reference cross-sectional unit for the models, table 4.3 shows that the intercept estimates for Lagos state, Ogun state, Ondo state, Osun state, and Oyo state differ from the reference intercept (0.0844532) on the average by 0.3213109, 0.1258875, -0.0308815, 0.0532214, 0.0964511 respectively. Table 4.4 reveal that the intercept estimates for Lagos, Ogun, Ondo, Osun and Oyo states differ from the reference intercept (0.3470862) on the average by 0.1597971, 0.0168424, 0.032787, 0.0705442, 0.0772922 respectively. Table 4.3 reports an R-square value of 81%, meaning that about 81 percent of the systematic variation in the ratio of internally generated revenue to total revenue (IGR/TR) can be explained by variation in total revenue budgeted (TRB), total revenue actual (TRA), total expenditure budgeted (TEB), total expenditure actual (TEA), statutory allocation (STA) jointly with every other variables subsumed in the intercept terms for each state. Table 4.4 reports an R-square value of about 39% which connote that about 39 percent of the systematic variation in the ratio of capital expenditure to total expenditure can be explained by the variation in total revenue budgeted (TRB), total revenue actual (TRA), total expenditure budgeted (TEB), total expenditure actual (TEA), statutory allocation (STA) jointly with every other variables subsumed in the intercept terms for each state, Given the R-square of the two models it can be deduced that the ratio of internally generated revenue to total revenue (IGR/TR) is more exogenous than the ratio of capital expenditure to total expenditure (CE/TE) in measuring performance using a single equation model with explanatory variables including, total revenue budgeted (TRB), total revenue actual (TRA), total expenditure budgeted (TEB), total expenditure actual (TEA), and statutory allocation (STA).

4.3 Random Effect Estimation

Because of problems inherent in the fixed effect model such as loss of degree of freedom as more dummy variables are added to the model, possibility of multi-collinearity, inability of the fixed effect model to track the impact of time-invariant variables e.t.c, random effect assume that the heterogeneity is random rather than fixed and that the random effect is incorporated into the error term thus forming a composite error term.

Table 4.5 Random Effect Estimation (Model 1)

Series: IGR/TR TRB TRA TEB TEA STA

Variable	Coefficient	Standard Error	Z-Test Values	Probability
C	.1341356	.0193092	6.95	0.000
TRB	1.02e-06	4.21e-07	2.42	0.016*
TRA	8.58e-08	3.01e-07	0.28	0.776
TEB	-1.33e-06	5.41e-07	-2.46	0.014*
TEA	1.52e-06	4.40e-07	3.45	0.001*
STA	1.23e-08	6.91e-07	0.02	0.986

R-square= 0.4800 Wald chi2(5) = 77.53

Prob > chi2 = 0.0000

Table 4.6 Random Effect Estimation (Model 2)

Series: CE/TE TRB TRA TEB TEA STA

Variable	Coefficient	Standard Error	Z-Test Values	Probability
C	.3297471	.0202671	16.27	0.000
TRB	3.23e-07	4.42e-07	0.73	0.466
TRA	3.20e-07	3.16e-07	1.01	0.312
TEB	-3.97e-07	5.68e-07	-0.70	0.484
TEA	4.66e-07	4.61e-07	1.01	0.312
STA	-3.47e-07	7.25e-07	-0.48	0.632

R-square= 0.2203 Wald chi2(5) = 23.74 Prob > chi2 = 0.0002

Table 4.5 reveals the random effect estimation result for model 1. The result shows that total revenue budgeted (TRB), total revenue actual (TRA) and total expenditure actual (TEA), and statutory allocation (STA) exert positive influence on state performance as measured by the ratio of internally generated revenue to total revenue, while total expenditure budgeted (TEB) has negative impact on the ratio of internally generated revenue to total revenue (a measure of state performance). The table shows that the ratio of internally generated revenue to total revenue will stand at .1341356 if all the explanatory variables are held constant, also that about 48 percent of the systematic variation in IGR/TR can be explained by variation in the explanatory variables (TRB, TRA, TEB, TEA, STA) and that all the explanatory variables jointly and significantly influence state performance as measured by the ratio of internally generated revenue and total revenue given the probability of f-statistics that is greater less than 0.05.

Table 4.6 reveals the random effect estimation result for model 2. The result show that total revenue budgeted (TRB), total revenue actual (TRA), total expenditure actual (TEA) and statutory allocation (STA) exert positive influence on state performance as measured by the ratio of capital expenditure to total expenditure (CE/TE), while only total expenditure budgeted (TEB) has negative impact on the ratio of capital expenditure to total expenditure (CE/TE) (a measure of state performance). Table 4.5 shows that the ratio of internally generated revenue to total revenue will stand at 0.3297471 if all the explanatory variables are held constant, and that about 22 percent of the systematic variation in (CE/TE), can be explained by variation in the explanatory variables (TRB, TRA, TEB, TEA, STA) and that all the explanatory variables jointly and significantly influence state performance as measured by the ratio of capital expenditure to total expenditure (CE/TE)

Post Estimation Test

Table 4.7 Restricted F Test of Heterogeneity (Cross-Sectional Specific)

	F-statistics	Probability	Degree of Freedom
Model 1	27.13	0.0000	F(5, 67)
Model 2	4.48	0.0012	F(5, 67)

Author's Computation, (2016)

Table 4.8 Hausman Test

	Chi-square stat	Probability
Model 1	62.03	0.0000
Model 2	23.26	0.0003

Author's Computation, (2016)

Table 4.7 reveal the result of the heterogeneity test conducted with respect to the cross-sectional specific effects. The result reported f-statistics values of 27.13, and 4.48 for model 1 and 2 respectively. The probability values of the reported f-statistics gave enough evidence to reject the null hypothesis that all differential intercept are equal to zero (no significant difference hypothesis) and conclude that there is significant difference in the intercept corresponding to the cross sectional units for the two models. This implies that the pooled OLS estimation restriction is not valid and as such cross sectional heterogeneity/uniqueness cannot be ignored. Table 4.8 reveals a chi-square value of 62.03, and 23.26 for mode 1, and 2 respectively alongside probability values of 0.0000, and 0.0003. Thus the Hausman test for models 1 and 2 report enough

evidence to reject the null hypothesis of no substantial difference between the fixed effect and random effect estimates, in favor of the alternative hypothesis that there is a substantial difference between fixed effect and random effect estimates. Thus, rejection of the null hypothesis implies that error component model (random effect estimator) is not appropriate because the random effects are probably correlated with one or more regressors. Hence the most reliable (most consistent and efficient) estimators for the study are the fixed effect (cross-sectional effect) estimations presented in tables 4.5 and 4.6 for models 1, 2 respectively.

V. Conclusion And Recommendations

From the analyses conducted in the study it can be observed that actual state revenue and expenditure exert positive influence government budget performance as measured in terms of ratio of internally generated revenue to total revenue, ratio of capital expenditure to total expenditure and budget balance. Thus the study concluded that though state's budgeted revenue and expenditure do influence government budget performance (measure in terms of ratio of capital expenditure to total expenditure), the true influence of state revenue and expenditure on government budget performance is rooted in the actual state revenue generated and actual expenditure in the state, as established in the measure of government budget performance in terms of ratio of internally generated revenue to total revenue and ratio of capital expenditure to total expenditure. Thus by implication it stands that the actual revenue that is generated in a state and the actual government expenditure of the state goes a long way in determining the level of government budget performance in southwestern Nigeria. Hence the study recommends improved revenue and expenditure estimating methods at the states level as it stands that the performance of government budget in terms of meeting revenues' targets and keeping expenditures at the confines of approved estimates depends largely on the process that brought about those figures which answers to the question of how realistic are the figures approved. Also the study recommends the need to prune the over-bloated size of government expenditure in order to established realistic budgets at the state level.

References

- [1]. Agagu, A. A. (2008). "Re-inventing the Nigerian Public Service in the Era of Reforms". *Pakistan Journal of Social Sciences* 5(3), 244-252.
- [2]. Alesina, A., Ricardo H., Rudolf H., and Ernesto S. (1999). "Budget institutions and fiscal performance in Latin America" *Journal of Development Economics* 59(2): 253- 273.
- [3]. Bleaney, M. (2010). "Budget Institutions and Fiscal Performance in Africa" *CREDIT Research Paper*, No. 10/02
- [4]. Douglas, M. (2002). *Handbook on Public Budgeting; Oregon (USA) Portland State University*, 14-27.
- [5]. Esu, B.B. and Nyang, B.J. (2009). "A case for Performance Management in the Public Sector in Nigeria. *International Journal of Business Management* Vol. 4 (4) April, 98-105.
- [6]. Faleti, K.O. and Darrel, M. (2012). "The Nigerian Budgeting Process; A Framework for Increasing Employment Performance". *Mediterranean Journal of Social Sciences* vol. 3(12) November, 193-213
- [7]. Greg, Hager (2001), "Performance –Based Budgeting: Concepts and Examples" *Research Paper No. 302 Legislature Research Commission, Frankfurt*.
- [8]. Hensen, S.C. and Van de Stede (2003). "Multiple facts of Budgeting: An Explanatory Analysis" *Management Accounting Research*. Vol. 5, Issues 3-4, 247-360.
- [9]. Metawie, M. and Gilman, M. (2005). "Problems with the Implementation of Performance Measurement Systems in the Public Sector..." 3rd Conference on Performance Measurement and Management Control, September, 1-24.
- [10]. Obadan, M.I. (2003). *National Development Planning and Budgeting in Nigeria: Some Pertinent Issues*. Lagos, ISBN: 978-2499-00-5. Broadway Press Limited.
- [11]. Obasanjo, O. (2003). On SERVICOM (online) Available on: <http://www.servenigeria.com>.
- [12]. Olaoye, F. O. (2008). *Concepts and Practice of Public Sector Accounting in Nigeria*. Ibadan: Aseda Publishing.
- [13]. Olomola, Ade S. (2009). "Strategies and Consequences of Budgetary Reforms In Nigeria", Paper Presented at the 65th Annual Congress of the Institute of International Public Finance (IIPF), Cape Town, South Africa, August 13-26
- [14]. Olomola, Ade S. (2012). "State Budgetary Allocations: An Appraisal of Budget Implementation and Effects in Nigeria" Paper Presented at the NISER Research Seminar Series (Nrss) Ibadan, September
- [15]. Omolehinwa, E. (2001). *Government Budgeting In Nigeria*. Lagos: Purmark Nigeria Ltd pp. 1, 22-23, 30.
- [16]. Omolehinwa, E. and Naiyeju, J.K. (2011). *Theory and Practice of Government Accounting in Nigeria*, Lagos, Purmark Nigeria Ltd.
- [17]. Omopariola, O. (1984). "Value for Money in the Public Sector: The Quest for Budget Reforms In the Federal Government". *The quarterly Journal of Administration*. XVIII, Number Three and Four April/July, 171 – 184.
- [18]. Omopariola O. (1991). "The Defects of Nigerian Government Budgets as a Framework for Performance Evaluation in the Nigerian Public Service" *Ife Journal of Economics and Finance*. Vol. 1, No one; September, 41 – 52.
- [19]. Osiyemi, I. M. (2005). "Budgeting and Financial Reporting for Efficient Economic Management in the Public Sector". *The Nigerian Accountant* Vol. 38 No. 1 January/March, 42-43.
- [20]. Poterba, James M. and Jürgen Von Hagen (1999) (eds.): *Fiscal institutions and fiscal performance*, Chicago: University of Chicago Press. 209–232.
- [21]. Rubin, I. (2000). *The Politics of Public Budgeting: Getting, Spending, Borrowing and Balancing*. 4th edition. New York: Chatham House.
- [22]. Wagner, A.H. (1883). *Finanzwissenschaft*, Leipzig.
- [23]. Young, R.D. (2003). *Performance–Based Budgeting System, Public Policy and Practice*. Institute for Public Service and Public Research, USA.