

Budget Implementation and Economic Growth in Nigeria

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ABSTRACT

This study examines the effect of budget implementation on the Nigerian economic growth and provides panacea to the problem of budget allocation and its implementation. To achieve this broad goal, the econometric model of ordinary least square (OLS) regression test was employed for analysis and time series data span from 1993 to 2010 was considered. Budget in the public sector of Nigeria has almost become a ritual or a yearly affair which though good in content but without appreciable result. The issue of budget implementation has long been a source of concern to the public and also considering the important impetus of budget implementation on economic growth and development in Nigeria. The dependent variable was proxied by gross domestic product (GDP), while the independent variables were public total expenditure (PEX), public recurrent expenditure (PRE), public capital expenditure (PCE) and external debt (EXD). The results revealed that budget implementation has a positive effect impact on Nigeria economic growth. The results further showed a positive relationship between GDP and public total expenditure (PEX), public recurrent expenditure (PRE), public capital expenditure, external debt (EXD), while public capital expenditure (PCE) shows a negative relationship to GDP. The study recommends that government should enact an enabling law that will ensure the workability of its budgets according to plans and increase the proportion of capital expenditure to recurrent expenditure so that the budget can have growth and development inducement among others

Keywords: Budget, Budget implementation, Government policy Public expenditure, Fiscal policy.

1.0 INTRODUCTION

A budget is a framework for revenue and expenditure outlays over a specified period usually one year (Olurankise (2012)). It is an instrument stipulating policies and programmes aimed at realizing the development objectives of a government. Meigs and Meigs, (2004) defined budgets as a comprehensive financial plan, setting forth the expected route for achieving the financial and operational goals of an organization". Earlier before then, Omolehinwa (2003) viewed Budget as the plan of dominant individuals in an organization expressed in monetary terms and subject to the constraints imposed by other participants and the environment indicating how the available resources may be utilized to achieve whatever the dominant individual agreed to be the organization's proprieties". Very recently, budgeting in Nigerian has continued to spring up various controversies as to the modality for preparation and administration in the country due to continuous change in government and consequential change in policy and ideology. Most especially with the understanding that a large percentage of the country's population has gotten, this has made them advocate the need to review the size of governance in order to push up the provisions available for more necessary projects. Only recently too was the controversy over the oil benchmark that has hindered the national assembly from the passage of the 2013 budget due to dispute over the price that must be used for budgeting purposes. It is important to state here that implementation cannot be discussed without appropriate planning and reassessing coupled with proper monitoring to facilitate its efficient implementation.

Budgeting and its process in Nigeria remain problematic both in the areas of preparation and implementation, hence, the need for adequate control aimed at improving effective resources utilization at the budget implementation stage. Fiscal policy is a fundamental instrument that can be used to lessen short-run fluctuations in output and employment. Meanwhile, in macroeconomic issues such as high unemployment, inadequate national savings, excessive budget deficits, and large public debt burdens, fiscal policy has been acknowledged to hold center stage in policy debate in both developed and developing economies. During the global economic recession of the 1930s, the government sectors of both developed and developing economies played a vital role in stimulating economic growth and development. In such situations every economy attempted to promote its economic growth through increasing government expenditures and reducing taxes. Public expenditure is a fundamental instrument that influences the sustainability of public finances via effects on

fiscal balances and government debt. Budget is traditionally generally seen from the phenomenon of shrink the target income, in contrast to the tendency to raise the expenditure budget target. This phenomenon helps to explain that the target revenue would be diminished if the area shows achievement in its realization.

In Nigeria, before ministries and spending agencies of the government can incur an obligation to make expenditures, they must secure spending authorization from the Ministry of Finance through the use of warrants. This warrant will authorize officers controlling votes to incur expenditure in accordance with the approved estimates subject to any reserved items. If the Appropriation Act has not come into operation at the beginning of the year, a provisional General Warrant may be issued to ensure continuity of the services of government at a level not exceeding those of the previous year. The length of period of spending authorization is determined in functional cash flow forecast for the period when payments are anticipated. During the phase of budget implementation, there are many possibilities for interventions and manipulations in view of the fact that officials have a great amount of discretionary power to decide which spending ministry or agency will be granted spending authorization. In spite of the specific nature of appropriation laws, the commitment phase of the expenditure process is a fertile ground for corrupt activities. In Nigeria, budget process includes budget preparation by the executive, legislative approval and implementation by the different ministry, department and parastatal of the government.

2.0. LITERATURE AND EMPIRICAL REVIEW

Various scholars have examined the effect of government budgeting on the economies of both developed and developing nations. Nurudeen and Usman (2010), investigated the effect of government expenditure on economic growth with disaggregated expenditure data from 1979 to 2007. The results reveal that government total capital expenditure, total recurrent expenditures, and government expenditure on education have negative effect on economic growth. While the foregoing studies focused on the Keynesian model which stipulates that expansion of government expenditure accelerates economic growth, the most relevant study in tracing the causal relationship from output to government spending is that of Ighodaro et.al (2010). In addition to total government expenditure they used a disaggregated government expenditure data from 1961 - 2007, specifically; expenditure on general administration and that of community and social services to determine the specific government expenditure that economic growth may have significant impact on. Other variables reflecting fiscal policy changes and political freedom were also included in the model to augment the functional form of Wagner's law. All the variables used were found to be I(1) and long run relationship exist between the dependent and the independent variables except in the case where only GDP was used as the independent variable. Wagner's hypothesis did not hold in all the estimations rather Keynesian hypothesis was validated.

Oyinlola (1993), examined the relationship between the Nigeria's defense sector and economic development, and reported a positive impact of expenditure on economic growth. Fajingbesi and Odusola (1999) empirically investigated the relationship between government expenditure and economic growth in Nigeria. The econometric results indicated that real government capital expenditure has a significant positive influence on real output. However, the results showed that real government recurrent expenditure affects growth only by little. A study by Ogiogio (1995) also revealed a long-term relationship between government expenditure and economic growth. Moreover, the author's findings showed that recurrent expenditure exerts more influence than capital expenditure on growth. Akpan (2005), used a disaggregated approach to determine the components (that include capital, recurrent, administrative, economic service, social and community service, and transfers) of government expenditure that enhances growth, and those that do not. The author concluded that there was no significant association between most components of government expenditure and economic growth in Nigeria. Castles and Dowrick (1990) used the shares of disaggregated public expenditure in health, education, and social transfers to explain economic growth. They found that social transfers and education had a positive effect on growth. Devarajan et al. (1996) also assessed the impact of different types of public expenditure on economic growth, but they did not find any significant relationship. Dogan (2006) investigated the relationship between national income and public expenditures for Indonesia, Malaysia, Philippines, Singapore, and Thailand. Granger causality tests were used to investigate the causal links between the two variables. The result of Granger causality revealed that causality runs from public expenditures to national income only in the case of Philippines, and there was no evidence for other countries.

Verma and Arora (2010) examined the validity of Wagner's law in India over the period from 1951 to 2008. Empirical evidences regarding short-run dynamics refuted the existence of any relationship between

economic growth and the size of the government expenditure. Afzal and Abbas (2012) reinvestigated the application of the Wagner's hypothesis to Pakistan over the period from 1960 to 2007 using time series econometrics techniques. The study found that Wagner's hypothesis does not hold for aggregate public spending and income for three periods (1961–2007, 1973–1990, and 1991–2007) while it holds only for the period from 1981 to 1991. However, when fiscal deficit is included, the results supported the existence of Keynesian views about public spending and growth.

Zheng et al. (2010) studied the empirical analysis on the relationship between the size of Chinese government, as measured by its annual spending, and the growth rate of the economy. More specifically, it designed to examine the applicability of Wagner's law to the Chinese economy. The statistics used in this research is annual time series data on total government spending and gross domestic product covering the period from 1952 to 2007. Empirical results showed no strong evidence in support of the validity of Wagner's law for Chinese economy. Olomola (2004) confirmed the Wagner's hypothesis both in short run and in the long run in Nigeria for the period from 1970 to 2001.

Komain and Brahmasrene (2007) examined the relationship between public expenditure and economic growth in Thailand, by employing the Granger causality test. The results revealed that public expenditure and economic growth are not co-integrated, but there exists a significant positive effect of public expenditure on economic growth. Barro (1991) in a study of 98 developed and developing economies found a positive but weak relation between public expenditure and economic growth over the 1960 to 1985 period. Loizides and Vamvouks (2005) employed the causality test to examine the relationship between public expenditure and economic growth, using data set on Greece, United Kingdom, and Ireland. The authors found that government size Granger causes economic growth in all the countries they studied. The results also indicated that economic growth Granger causes public expenditure for Greece and United Kingdom.

Bingxin et al. (2009) assessed the impact of the composition of public expenditure on economic growth in developing countries. They used a dynamic generalized method of moment (GMM) model and a panel data set for 44 developing countries between 1980 and 2004. The results indicated that the various types of government spending had different impact on economic growth. In Africa, human capital expenditure contributes to economic growth whereas, in Asia, capital formation, agriculture, and education expenditure had strong growth promoting effect. In Latin America, none of the public expenditure items was significant impact on economic growth. Ramayandi (2003) reviewed the relationship between government size and economic growth in the context of Indonesia and identified that government size tends to have a negative impact on growth.

Herath (2004) examined the relationship between public expenditure and economic growth in Sri Lanka for the period from 1959 to 2003. The study found that government expenditure has a positive effect on economic growth; further his study suggested that openness is beneficial for Sri Lanka as it increases economic growth. Alam et al. (2010) examined the long-run relationship between social expenditure and economic growth in Asian developing countries including Sri Lanka. According to the analysis of the study concluded that expenditure in infrastructure, education, and health played an important role in promoting economic growth in all the selected Asian countries. Dilrukshini (2004) studied the relationship between public expenditure and economic growth in Sri Lanka from 1952 to 2002 using time series data to test the validity of Wagner's law and found that there is no empirical support either for the Wagner's law or Keynesian hypothesis, in the case of Sri Lanka.

3.0 INTRODUCTION

This study employs the use of Ordinary Least Square of regression analysis test the effect of international financial institutions on the Nigerian economic growth between 1993 and 2010. Secondary data for the study were sourced from Central Bank of Nigeria's publications and statistical bulleting as well as publications from the Federal Office of Statistics (FOS)

3.1 MODEL SPECIFICATION

The model adopted in this study is that of Mayandy Kesavarajah (2012) in the study of the Wagner's Law in Sri Lanka: This model will be modified by adding two additional variables to suit the Nigerian situation. The model can be represented as:

$$\text{GDP} = f(\text{PEX}, \text{PRE}, \text{PCE}, \text{EXD}, \mu) \text{-----} (1)$$

Where

- GDP - Gross Domestic Product
- PEX - Public Total Expenditure
- PRE - Public Recurrent Expenditure
- PCE - Public Capital Expenditure
- EXD - External debt
- μ - Stochastic variable
- F - Functional notation

This model for simplicity sake will be presented in mathematical terms as depicted below

$$GDP = \beta_0 + \beta_1PEX + \beta_2PRE + \beta_3PCE + \beta_4EXD + \mu$$

Where

$\beta_0 - \beta_4$ = coefficient of estimates

3.3 PRIOR EXPECTATION

In this study, the expected outcome of each of the explanatory variables adopted is presented below:

1. It is expected that Public Total Expenditure (PEX) will be positively related to Gross Domestic Product (GDP). That is f' (PEX) is expected to be >0 . This implies that an increase in Public Total Expenditure is expected to result into significant increase in Gross Domestic Product.
2. The level of Public Recurrent Expenditure (PRE) is expected to show a negative relationship with Gross Domestic Product (GDP). That is f' (PRE) is expected to be <0 . That is an increase in level of Public Recurrent Expenditure is expected to bring about a decrease in Gross Domestic Product (GDP).
3. It is expected that the level of Public Capital Expenditure (PCE) will keep a positive relationship with Gross Domestic Product (GDP). That is f' (PCE) is expected to >0 . This implies that an increase in Public Capital Expenditure will result into increase in Gross Domestic Product (GDP).
4. Also, External Debt (EXD) expected is expected to keep a negative relationship with Gross Domestic Product (GDP). That is f' (EXD) is expected <0 . This implies that an increase in EXD is expected to result into a reduction in the value of Gross Domestic Product (GDP).

4.0 DATA ANALYSIS AND FINDINGS

The table below shows the results of the ordinary least square test conducted on the specified model. The OLS results reveal the relationship that exists between the dependent variable and each of the independent variable

Table 4.1 Summary of Result

VARIABLE	COEFFICIENTS	STANDARD ERROR	PROBABILITY
C	7.573314	0.001883	0.0000
PEX	0.000691	0.000346	0.0674
PRE	0.001014	0.000759	0.2047
PCE	-6.52E-05	0.000740	0.9312
EXD	0.000483	0.000227	0.0529

$R^2 = 0.990200$ $Adj R^2 = 0.987185$ $F-STAT = 328.3961$ $DW-STAT = 0.992515$

Source: Author's Computation

From table 4.1, the relationship between the dependent variable (GDP) and the independent variables (PEX, PRE, PCE and EXD) can be deduced can be expressed mathematically as in:

$$MD = 7.573314 + 0.000691_{PEX} + 0.001014_{PRE} - 6.52E-05_{PCE} + 0.000483_{EXD} + \mu$$

From the above result, the constant parameter is positive, showing that if all Independent variables are held constant, the dependent variable (GDP) will increase by 7.573314 units. The coefficient of PEX is also positively related to GDP with an estimate of 0.000691. This implies that an increase in the Public Total Expenditure (PEX) will lead to an increase in GDP by 0.000691 units. Also, the coefficient of PRE also showed a positive relationship with Gross domestic product (GDP) with a coefficient of 0.001014. This means that an increase in the Public recurrent expenditure in the country will lead to increase in the Gross domestic product (GDP) by 0.001014 units. Meanwhile, the coefficient of Public capital expenditure (PCE) shows a negative figure of -6.52E-05, meaning that an increase in the value of the Capital expenditure (PCE) will lead to 6.52E-05 unit decrease in the Gross domestic product (GDP). The coefficient of EXD on its own part showed a positive relationship with Gross domestic product (GDP), with a coefficient of 0.000483. This means that an increase in the value of External debt of the nation will lead to 0.000483 units increase in the value of Gross domestic products.

The coefficient of multiple determinations (R^2) as given in the result of the regression result of the ordinary least square is given as 0.990200 which implies 99.02% with an adjusted R^2 of 0.987185 which implies 98.72%. This explains that the explanatory variables (PEX, PRE, PCE and EXD) accounted for 98.72% behaviour of the Gross Domestic Product (GDP), while the remaining 1.28% is accounted for by the stochastic variable. The t-test is done to test the significance of each if the explanatory variables using the student t-distribution test. It is carried out on a two tail test and by comparing the T-Cal and the T-tab.

The decision rule is that If T. Cal > T-tab, accept H_1 and reject H_0 and if T- Cal < T-tab, accept H_0 and reject H_1 .

Table 4.2. Summary of T-statistical test for the parameters

Variables	T-calculated	T-tabulated	H_0	H_1	Remark
C	4021.777	1.771	Reject	Accept	Significant
PEX	1.995397	1.771	Reject	Accept	Significant
PRE	1.335391	1.771	Accept	Reject	Insignificant
PCE	-0.088024	1.771	Accept	Reject	Significant
EXD	2.129467	1.771	Reject	Accept	Significant

From the above table, it can be deduced that the constant parameter and two other variables (PEX and EXD) are statistically significant while the other two explanatory variables (PRE and PCE) shows statistical insignificance.

Table 4.3. Summary of F-statistical test

Summary		Decision		
F-Calculated	F-Tabulated	H_0	H_1	Remark
328.3961	3.03	Reject	Accept	Significant

The F-test shows the statistical significance of the whole model.

The table above show F-Cal > F-Tab, hence, we accept H_1 and reject H_0 . The rejection of H_0 means the model is statistically significant.

The statistical test of Durbin Watson shows that DW value falls within the "Inconclusive region". This means that the statistical presence of autocorrelation in the model is inconclusive.

4.1 SUMMARY AND IMPLICATION OF FINDINGS

The results in this study shows that only Public Capital expenditure (PCE) shows negative relationship with the explained variable while the constant parameter and all other explanatory variables; Public total expenditure (PEX), Public recurrent expenditure (PRE) and External debt (EXD) shows a positive relationship with the Gross domestic product (GDP) of the country. Meanwhile in the statistical test carried out, only the coefficient of Public recurrent expenditure (PRE) was statistically insignificant while others shows significance. The coefficient of multiple determinants (R^2) shows the goodness of fit of the model with an estimated 0.990200 which indicates that approximately 99% of the behaviour of behaviour of the GDP of any economy can be explained by the variously identified explanatory budget implementation variables (PEX, PRE, PCE and EXD). While the error term account for the remaining 1%. Also, the Durbin Watson statistics shows that the autocorrelation test is inconclusive, hence implying the need for further research on this topic in which this objective work will serve as a starting point for.

The implication of the above is therefore that a nation needs to take the issue of budget very seriously. A critical evaluation of the result also revealed that the variable with lowest of effect is the debt level which implies that the multiplier effect of any foreign debt obtained by a nation is not always commensurate with the volume of loan gotten. Most of the return on it is used in the servicing of the loan itself. The coefficient of Public capital expenditure which shows negative is not in any way surprising as the benefits of these expenses are not meant to be enjoyed in the immediate year but expected to have a multiplier effect over a long period of time. Capital expenditure on the short-run do usually seem like a negative decision at the time of making them but later result into positivity as the spill-over effect begins to surface. On the overview, the model was significant in the explanation of the behaviour of a nation's performance and therefore implies that an appropriate implement of budgetary plan will increase the performance level of a nation.

5.0 SUMMARY OF FINDINGS AND RECOMMENDATIONS

The paper critically examined the effect of Budget implementation on the performance the Nigerian economy. The main finding emerging from this research indicates that Budget implementation has significant impact on the performance of the economy; hence, it justifies the assertion of the Wegner who uphold the preparation of a good budget and it appropriate implementation. In light of the findings of this study, it is of cognizance to recommend policy measures to further enhance the effect of budget implementation on national performance. The following recommendations were made:

1. Nations should endeavor to include more capital expenditure in it budgetary plan in other to speed record a yearly increase in the value of growth process that is brought about by the future effect of capital investment.
2. The proportion of debt finance in the national budget should be kept as low as possible as well as make appropriate and judicious use of such.
3. Apart from paper documentations, government should ensure effective implementation of budget by translating the budgeted amount into tangible assets such as good roads, infrastructures, electricity supply among others so that the ordinary citizen on the road can feel the impact of good governance.
4. Finally, the government should also try to put in place effective machinery that will ensure the strict adherence to due process and total implementation of annual budget provision and avoid diversion of public funds to personal uses..

REFERENCES

- Afzal, M. and Q. Abbas,(2012) "Wagner's law in Pakistan: another look," *A Journal of Economics and International Finance*, (2) 1, 12–19,
- Akpan, N. (2005) "Government Expenditure and Economic Growth in Nigeria: A Disaggregated Approach. *CBN Economic and Financial Review*", 43(1).
- Alam, S., A. Sultana, and Butt M. S., (2010) "Does social expenditures promote economic growth? A multivariate panel co-integration analysis for Asian Countries," *European Journal of Social Sciences*, (14) 1, 44–54

- Barro, R.J. (1991) "Economic growth in a cross section of countries," *Quarterly Journal of Economics*, (106)2, 407–443.
- Bingxin, Yu, Fan, S, and Saurkar, A (2009) "Does composition of government spending matter to economic growth?" in Proceedings of the International Association of Agricultural Economists Conference, Beijing, China,
- Castles, F.G and Dowrick, S. (1990) "Impact of government spending levels on medium term economic growth in the OECD, 1960– 1985," *Journal of Theoretical Policies*, (20)1, 173–204
- Devarajan, S, Swaroop, V and Zou, H. F (1996) "The composition of public expenditure and economic growth," *Journal of Monetary Economics*, (37) 2, 313–344.
- Dilrukshini, W.A, (2004) "Expenditure and economic growth in Sri Lanka: co-integration analysis and causality testing," *Staff Studies*, (34)1, 51–68.
- Dogan, E. and Tang T. C, (2006) "Government expenditure and national income: causality tests for five south East Asian countries," *International Business and Economic Research Journal*, (5)10.
- Fajingbesi A., A., and Odusola A. F.(1999). Public Expenditure and Growth. A Paper Presented at a Training Programme on Fiscal Policy Planning Management in Nigeria, Organized by NCEMA, Ibadan, Oyo State, 137-179
- Herath, S. (2004) "Size of the government and economic growth: an Empirical Study of Sri Lanka," SRE— Discussion Papers 2010/05, WU Vienna University of Economics and Business, Vienna, Austria, 2004.
- Ighodaro, Clement A. U. and Dickson E. Oriakhi (2010) "Does The Relationship Between Government Expenditure And Economic Growth Follow Wagner's Law In Nigeria?" *Annals of the University Of Petroşani, Economics*, 10(2), 185-198.
- Komain, J. and T. Brahmasrene, (2007) "Relationship between government expenditures and economic growth in Thailand," *Journal of Economics and Economic Education Research*, (8) 1, 93–102.
- Loizides, J. and G. Vamvoukas, (2005) "Expenditure and economic growth: evidence from trivariate causality testing," *Journal of Applied Economics*, (8)1, 125–152 *Tax Journal*, (33)1,189-201.
- Mayandy K. (2012) Wagner's Law in Sri Lanka: An Econometric Analysis
- Meig, W, & Meig, F. (2004). *Accounting the Basic Business Decision New York, USA*, MCGraw-Hill Book Company, 51-68.
- Nurudeen, Abu and A. Usman (2010) "Government Expenditure and Economic Growth In Nigeria, 1970-2008: A Disaggregated Analysis" *Business and Economics Journal*, Volume 2010 BEJ-4, 1-11 Ogiogio, G.O (1995) Government Expenditure and Economic Growth in Nigeria. *Journal of Economic Management*, 2(1). <http://astonjournals.com/bej> Research Article
- Olomola, P.A. (2004) "Co-integration analysis-causality testing and Wagner's law: the case of Nigeria," *Journal of Social and Economic Development*, (6)1, 76–90
- Olurankise, F. (2012) "due process and budget implementation; An evaluation of Nigerian Public Sector Auditing", *Asian journal of finance and accounting*, ISSN 1946-052x. (4)2, 213-214.
- Omolehinwa, E. (2003). *Government Budgeting in Nigeria*, Lagos, Nigeria, Pumarck Nig Ltd, 1-14.
- Oyinlola O, (1993). Nigeria's National Defence and Economic Development: An Impact Analysis. *Scandinavian Journal of Development Alternatives*, 12(3).
- Ramayandi, A. (2003) "Growth and government size in Indonesia: some lessons for the local authorities, Working Papers in Economics and Development Studies 2003/02, Department of Economics, Padjadjaran University, 2003.
- Verma, S. and R. Arora, (2010) "The Indian economy support Wagner's law? An econometric analysis," *Eurasian Journal of Business and Economics*, (3) 5, 77–91.
- Zheng, Y, J. Li, X. L. Wong, and C. Li, (2010) "An empirical analysis of the validity of Wagner's law in China: a case study based on Gibbs sampler," *International Journal of Business and Management*, (5) 6.

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