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Abstract

This study assessed the effect of budget implementation on economic growth of Nigeria. Gross Domestic Product was used as a proxy for economic growth, while Public capital expenditure (PCE), Public recurrent expenditure (PRE), and public debt servicing (PDS) were used as proxies for budget implementation. Secondary data sourced from CBN statistical bulletin for the period of 1999 – 2018 was used. The study analyzed both the short and long run effect of budget implementation on economic growth. The result of the study shows that in the short run all the variables have no significant effect on economic growth, and in the long run the result shows they still have no significant effect on economic growth. The study therefore recommends that the government should invest more on capital projects in other to spin the wheel of economic growth faster. The government should not consider increasing recurrent expenditure as a way of achieving economic growth

Keywords: Budget implementation, Capital Expenditure, Recurrent expenditure, Economic growth

Introduction

Every nation both developed and developing is confronted with the issue of determining how to generate apportion and spend public fund, and how this funds are used to a large extent determine how public policy objectives are achieved (Edem & Nkalu 2017). The provision of security and welfare services of the citizenry is in fact the essence of governance all over the world. Such welfare services includes education, housing health care, food, social amenities etc. a measure of the success or failure of any government is how well these services are provided (Olurankise and Oloruntobe 2017). The instrument or mechanism that enables the government fulfill this obligation is the budget (Olurankise & Oloruntobe 2017). in this line of thought Ogboru (2016) sees budget to be a high way map which must be followed to reach a desired destination, without which a government may roam aimlessly, without knowing where it is going or where it should go. As noted in Kwanashie (2013) the various annual budgets implemented within a medium term plan and a medium term expenditure framework are among the lubricants
that swings the wheels of an economy toward success. Of global interest is the issue of budget implementation, which has attracted a lot of interest both in the developing and developed countries, (Olaoye & Olugbamiye 2019). Because of the role budgeting play in achieving the economic and non-economic objective of government, poor budget implementation is of great concern to government at all levels (Samuel & Wilfred, 2009, Onaolapo & Olaoye, 2013).

In Nigeria, budgeting and its process has remained problematic both in the terms of preparation and implementation, as a result, there is the need for adequate control geared towards improving effective resource utilization at the stage of budget implementation. Usually the complaint includes non-release, partial release and delay in disbursing approved funds for budgeted expenditures (Oniore 2014). Since 1999, these delays have become a recurring decimal and have greatly slowed down Nigeria democratic journey to economic prosperity (Olaoye 2016). Carefully planned and implemented budget can move an economy to its desired place. Alluding to this, Adeline & Okwo (2014) stated that over the past 16 year Australia has enjoyed continuous economic growth attributable to her effective budgeting system. Collaborating this Olufemi (nd) asserted that “the success of most Asian economies that experienced higher growth rate had been attributed to the effective use of budget instrument in stimulating both domestic and foreign investment in these economies”.

This proposition appears not to be true in the case of Nigeria, whose budget is always on the increase from year to year. For example according to national Bureau of statistics, from 2014 to 2018 the annual budget figure have been N3.53, N4.45, N5.06, N6.06 and N8.6 trillion respectively. With such increase in budget figures, one expect a corresponding growth in the economy, instead the reverse is the case as the GDP of the nation for the period of 2015 to 2018 were – 11.57, - 13.98, - 12.93, and 1.93 respectively (Sani & Nwite 2018) what then is the problem with Nigerians budget implementation, for this reason series of studies have been done on the effect of budget implantation on economic growth, however most of the studies looked at the individual component of budget implementation such as government spending on infrastructure, (Babatunde (2018) capital flight, (Onyele & Nwokocha, 2016), budget transparency (Ogboru 2016); education (Chude & Chude 2013), capital budget (Olaoye, Olaoye, & Afolabi 2017). Hence this study examined holistically the impact of budget implementation on economic growth of Nigeria.

The general objective of this study is to assess the effect of budget implementation on Nigerian economic growth, however the specific objective of this study is to:

- Ascertain the impact of public recurrent expenditure on Nigeria growth.
- Investigate the impact of public capital expenditure on Nigeria economic growth.
- To ascertain the effect of public debt services on Nigeria economic growth.

**Review of Related literature**

**Theoretical Review**

This study is anchored on Keynesian, theory of economic growth this theory was propounded by a British economist John Maynard Keynes in 1936, during the great depression Keynes regards public expenditure as an exogenous factor which can be utilized as a policy instruments promote economic growth. Therefore an increase in government spending is likely to bring about increase
in employment, profitability and investment through multiplier effect. Government expenditure thereby supplement aggregate demand (olaoye,2016).

**Empirical Review**

Olaoye, F.O (2016) evaluated the effect of budget implementation on Nigeria’s economic growth. Gross Domestic Product (GDP) was used as the explained variable while Public Recurrent Expenditure (PRE), Public Capital expenditure, (PCE) and Public Debt Service (PDS) were used as the explanatory variables of the study. Data on these variables were sourced from the Central Bank of Nigeria statistical bulletin from 1986 to 2014. The study adopted Ordinary Least Square (OLS), Co-integration and Error Correction Model (ECM) in analyzing respectively the short and long-run effect of budget implementation on Nigeria’s economic growth. He found that in the short run, PRE have a positive relationship with GDP while PCE and PDS have a negative relationship with GDP. However, in the long run, there was a complete turn of relationship as to what was obtained in the short run. In both the long run and short run, only PRE is statistically significant at 5% level of significance.

Oke, M.O(2013), writing on the effect of budget implementation on the Nigerian economic growth. Using ordinary least square (OLS) regression for analysis and time series data covering a period of 1993 to 2010. 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 on Nigeria economic growth and that a positive relationship exist 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.

Sani, A.I, & Nwite, S. (2018) in their study investigated the impact of Public Capital Expenditure (PCE), Public Recurrent Expenditure (PRE) and Public Debt Expenditure (PDEX) on economic growth of Nigeria during the period of 2014 to 2018. Using ex-post factor research design, secondary data on PCE, PRE and PDEX (explanatory variables) and economic growth (dependent variable) proxied by Gross Domestic Product (GDP) collected from Central Bank of Nigeria (CBN) and National Bureau of Statistics (NBS) reports. The data were empirically analyzed using multiple regressions. They found that PCE and PRE have significant impact on GDP except PDEX that do not show any impact.

Okpala, K.E. (2015) in his study investigated the influence of budget approval timing on the degree of implementation. A cross sectional design was used and the population of the study consists of 288 senior staff of federal government ministries, departments and agencies randomly selected. Using structured questionnaire that was developed from the conceptual, theoretical and empirical framework from previous studies and validated by professionals. Regression technique was used to measure the relationship between the variables. The findings showed that there is a statistically significant relationship between preliminary approval timing and the degree of implementation and legislative approval timing and the degree of implementation. The study concluded that undue delay in budget approval timing is responsible for poor degree of budget
implementation in Nigeria.

Onyiah, I.A., Ezeamama, N.C., Ugwu, J.N., & Mgbodile, C.C. (2015) studied the impact of budget implementation and control reforms of the Federal Government of Nigeria with a view to analyzing their impact on resource management, level of productivity and efficiency and personnel and overhead costs in Nigeria. The study employed ex-post facto descriptive research design. The respondents comprised of Accountants and Economists who are in the federal civil service in Enugu state. Primary data were collected with the aid of a structured 5-point likert scale questionnaires. Analysis of Variance (ANOVA) was used to test the hypotheses. The findings showed that poor project conceptualization, design or planning practices by Ministries, Departments and Agencies (MDAs) resulted into low resources management.

Onyele, K.O. & Nwokocha, E.B. (2016), in their study examined the effect of capital flight on budget implementation in Nigeria. Co-integration test and vector error correction were employed for the analysis using time series data spanning from 1986 to 2014. The dependent variable (budget implementation) was proxied by aggregate government expenditure, while the independent variables were capital flight, external debt, government revenue, economic openness, and real exchange rate. The co-integration results revealed that a long run equilibrium relationship existed among the variables. The error correction term indicated a rapid realignment to long run convergence by approximately 87 percent. The results further showed that capital flight was positive and significant in influencing government expenditure in Nigeria. Also, the Wald test showed that there is a significant short run causal relationship between capital flight and government expenditure in Nigeria. Based on these findings, the study recommended inter alia that government should set up a vibrant monitoring team to ensure that funds allocated for various projects are used efficiently.

Chude, N.P., & Chude, D.I (2013) writing on the effects of public expenditure in education on economic growth in Nigeria over a period from 1977 to 2012, with particular focus on disaggregated and sectoral expenditures analysis. The study used Ex-post facto research design and applied time series econometrics technique to examine the long and short run effects of public expenditure on economic growth in Nigeria. The results indicate that Total Expenditure Education is highly and statistically significant and have positive relationship on economic growth in Nigeria in the long run. They concluded that economic growth is clearly impacted by factors both exogenous and endogenous to the public expenditure in Nigeria.

**Methodology**
This study made use of Ex-post factor research design. The choice of this design is based on the fact that the data cannot be manipulated by the researcher. Secondary data covering a period of 1999 – 2018, which were sourced from CBN statistical bulleting 2018, was used for the study. Ordinary Least square (OLS) regression technique was used for the analysis. The data was tested for unit root, and co integration was used to test for stationarity and long run relationship of the variables used.

**Model Specification**
The study adopted the model of olaoye (2016), which is specified below
\[
GSP = f(PRE, PCE, PDS)
\]
Where:
GDP = Gross Domestic Product
PRE = Public Recurrent Expenditure
PCE = Public Capital Expenditure
PDS = Public Debt Servicing

Stating the model econometrically gives
GDP = \( \beta_0 + \beta_1 \text{PRE} + \beta_2 \text{PCE} + \beta_3 \text{PDS} + \mu \) --- Eqn 3.3

\( \beta_0 \) = Constant Parameter
\( \beta_1 - \beta_3 \) = Co-efficients of Estimate
\( \mu \) = Stochastic or Error Term

### Analysis and Interpretation of Results

#### Table 1 Stationarity (Unit Root) Test Results

<table>
<thead>
<tr>
<th>(Difference) Variables</th>
<th>ADF Test Statistic</th>
<th>Mackinnon’s Critical Values at 1%, 5% &amp; 10%</th>
<th>Order of Integration</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>DGDP</td>
<td>-4.891864</td>
<td>-3.920350</td>
<td>-3.065585</td>
<td>-2.673459</td>
</tr>
<tr>
<td>DCEP</td>
<td>-3.082174</td>
<td>-3.959148</td>
<td>-3.081002</td>
<td>-3.081002</td>
</tr>
<tr>
<td>DREP</td>
<td>-8.255371</td>
<td>-3.886751</td>
<td>-3.052169</td>
<td>-2.666593</td>
</tr>
<tr>
<td>DDRE</td>
<td>-4.575240</td>
<td>-4.057910</td>
<td>-3.311910</td>
<td>-2.701103</td>
</tr>
</tbody>
</table>

Source: Extracts from E-Views 9 Output

Table 1 presents the unit root stationarity test results for the employed data. Generally, the absolute values of the ADF test statistic for all the employed study variables are higher compared to all their corresponding Mackinnon’s critical values at 1%, 5% and 10% respectively. In all, the study variables are integrated of order I(2). As such, they are deemed fit for utilization in subsequent estimations.

#### Table 2 Ordinary least Square multiple regression

Dependent Variable: DGDP
Method: Least Squares
Date: 07/06/19  Time: 14:08
Sample (adjusted): 2001 2018
Included observations: 18 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>18.45439</td>
<td>905.3304</td>
<td>0.020384</td>
<td>0.9840</td>
</tr>
<tr>
<td>DCEP</td>
<td>-1.087684</td>
<td>3.050404</td>
<td>-0.356570</td>
<td>0.7267</td>
</tr>
<tr>
<td>DREP</td>
<td>0.525928</td>
<td>2.140074</td>
<td>0.245752</td>
<td>0.8094</td>
</tr>
</tbody>
</table>
DDRE  0.867463  2.157344  0.402098  0.6937

R-squared  0.018196  Mean dependent var  11.70167
Adjusted R-squared  -0.192190  S.D. dependent var  3472.524
S.E. of regression  3791.562  Akaike info criterion  19.51207
Sum squared resid  2.01E+08  Schwarz criterion  19.70993
Log likelihood  0.086489  Hannan-Quinn criter.  19.53936

Source: Extracts from E-Views 9 Output
From table 2, CEP, REP and DRE are the independent variables whereas the GDP is the dependent variable. The result of the analysis shows that CEP, REP and DRE are not significant at 5 percent level of significance during the period of the study. The coefficient of determination (R²) of 0.018196 implies that variations in the explanatory variables account for 1.82% of the variations in gross domestic product, whereas the remaining 98.18% of the variations is attributable to other variables not captured in the study. F – Statistic measures the overall significance of the model. The F-statistic is 0.086489 and the probability of F-statistic is 0.966291. This is far more than 0.05 power of test. This means that the independent variables jointly are insignicant in economic growth. Durbin Watson is 2.320102 showing the absence of auto correlation.

Table 3 Johansen’s Co-integration test result
Date: 07/06/19   Time: 14:36
Sample (adjusted): 2003 2018
Included observations: 16 after adjustments
Trend assumption: Linear deterministic trend
Series: DGDP DCEP DREP DDRE
Lags interval (in first differences): 1 to 1

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Trace Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.897823</td>
<td>84.22888</td>
<td>47.85613</td>
<td>0.0000</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.804972</td>
<td>47.73209</td>
<td>29.79707</td>
<td>0.0002</td>
</tr>
<tr>
<td>At most 2 *</td>
<td>0.650021</td>
<td>21.57827</td>
<td>15.49471</td>
<td>0.0053</td>
</tr>
<tr>
<td>At most 3 *</td>
<td>0.258262</td>
<td>4.780140</td>
<td>3.841466</td>
<td>0.0288</td>
</tr>
</tbody>
</table>

Trace test indicates 4 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Max-Eigen Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.897823</td>
<td>36.49679</td>
<td>27.58434</td>
<td>0.0028</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.804972</td>
<td>26.15382</td>
<td>21.13162</td>
<td>0.0090</td>
</tr>
<tr>
<td>At most 2 *</td>
<td>0.650021</td>
<td>16.79813</td>
<td>14.26460</td>
<td>0.0195</td>
</tr>
<tr>
<td>At most 3 *</td>
<td>0.258262</td>
<td>4.780140</td>
<td>3.841466</td>
<td>0.0288</td>
</tr>
</tbody>
</table>

Max-eigenvalue test indicates 4 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Source: Extracts from E-Views 9 Output

The Johansen's cointegration results shown in table 3 above confirm prevalence of the cointegrating equations, thus indicating the prevalence of a significant long run relationship among the time series variables under study. In both trace and Max-Eigen Statistic, all the variables are significant at 0.05 level of significant indicating that the error at the short run could be corrected in the long run.

Table 4 Error correction Model

Dependent Variable: DGDP
Method: Least Squares
Date: 07/06/19   Time: 14:47
Sample (adjusted): 2002 2018
Included observations: 17 after adjustments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>720.4504</td>
<td>728.3740</td>
<td>0.989122</td>
<td>0.3421</td>
</tr>
<tr>
<td>DCEP</td>
<td>3.899819</td>
<td>2.788328</td>
<td>1.398623</td>
<td>0.1872</td>
</tr>
<tr>
<td>DREP</td>
<td>-0.550717</td>
<td>1.650014</td>
<td>-0.333765</td>
<td>0.7443</td>
</tr>
<tr>
<td>DDRE</td>
<td>-2.054218</td>
<td>1.834847</td>
<td>-1.119558</td>
<td>0.2848</td>
</tr>
<tr>
<td>ECM(-1)</td>
<td>-1.245658</td>
<td>0.353968</td>
<td>-3.519125</td>
<td>0.0042</td>
</tr>
</tbody>
</table>

R-squared 0.516601   Mean dependent var 33.18176
Adjusted R-squared 0.355468 S.D. dependent var 3578.163
S.E. of regression 2872.647 Akaike info criterion 19.00378
Sum squared resid 99025201 Schwarz criterion 19.24885
Log likelihood -156.5322 Hannan-Quinn criter. 19.02814
F-statistic 3.206058 Durbin-Watson stat 1.833519
Prob(F-statistic) 0.052309
From table 4 above, the ECM coefficient is -1.245658. It implies that approximately 124.57% of the disequilibrium in gross domestic product (GDP) in Nigeria is offset within the period due to distortions in the explanatory variables. The coefficient of determination ($R^2$) of 0.516601 indicates that about 51.66% of the variation in Nigeria's budget implementation in the long run is explained by variations in the explanatory variables. Durbin Watson value of 1.833519 is within the acceptable region.

Summary of findings, Conclusion and recommendations

Summary of findings
From the result of the analysis, the findings are thus summarize:
Public capital expenditure has no significant effect on economic growth in Nigeria both in the short run, and in the long run.
Secondly, Public recurrent expenditure both in the short run and in the long run has no significant effect on economic growth in Nigeria.
Thirdly, debt servicing does not significantly affect the economic growth of Nigeria in the short run, as well as in the long run.

Conclusion
Based on the findings the researcher concludes that Nigeria’s budget implementation in Nigeria does not significantly affect Nigeria’s economic growth. This is a reflection of Nigeria’s situation where annual budget increases yearly (2015 to 2018 the annual budget figure N4.45, N5.06, N6.06 and N8.6 trillion respectively). Without a corresponding increase in GDP (2015 to 2018 GDP were – 11.57, - 13.98, - 12.93, and 1.93 respectively). A situation where a lot of money is budgeted and only a small percentage of the budgeted amount is made available for projects, and what is released will be divided among contractors and government officials, will in no way affect the economy positively.

Based on the conclusion the researcher therefore recommend that
The government should put in place a mechanism for monitoring how budgeted amount is been implemented.
There should be periodic review of sectorial budget implementation by an independent body and their report should be made public.
There should be penalty for misappropriation or diversion of budgeted funds.
The government should be prudent in using borrowed fund as the cost of servicing such debt can be a leakage to the economy

References
Adeline, N. & Okwo, I.M (2014). Budgeting in Australia: Lessons for Nigeria. IOSR Journal of Humanities and Social Science, 19(10), 77-91
Publishers.

