
Public Financial Management and Economic Development in a Developing Country

Emenike Kalu O.

Department of Banking and Finance,
Rhema University Aba, Abia State, Nigeria
emenikekaluonwukwe@yahoo.com

Abstract

This study evaluates the impact of public financial management on economic development in a developing country. Specifically, the study assesses how public revenue and expenditure influence gross domestic product using time series data from Nigeria for the period 1981 to 2013. The study carries out descriptive analysis and multiple ordinary least square regression tests on the data. The results from the unit root test show that the public revenue, expenditure and GDP series are integrated of order one. The results of the regression model show that public revenue has significant positive effect on economic development in Nigeria. The results further provide evidence to show that the public expenditure does not significantly impact economic development in Nigeria. The study recommends among others that the Federal Government of Nigeria should put in place institutions that will enhance and consolidate prudent public financial management in Nigeria.

Keywords: public financial management, economic development, regression, developing country

1- Introduction

Public financial management underlies all government activity. It encompasses the mobilisation of revenue; the allocation of these funds to various activities; expenditure; and accounting for spent funds (Simson, Sharma and Aziz, 2011). Public financial management in developing economies involves the process of utilising the scarce resources of the state in a manner that will achieve reduction in poverty. Pere and Buseni (2013) observe that the main focus of public financial management is how to efficiently and effectively utilise public resources to meet the needs of the people in an equitable manner. Therefore, effective delivery of public services to enhance economic development involves efficiency in revenue mobilisation and transparency, accountability and control in public expenditure. Sustainable and equitable economic development is clearly a predominant objective of public financial management policy. Many public programs are specifically aimed at promoting sustainable and equitable economic development. Public financial management can, and has, played important roles in physical and human capital formation over time. Hence, well functioning systems for public financial management are basis for improved economic development.

Evidence-based knowledge of the impact of public financial management, proxied by the government revenue and expenditure, on economic development is important to obtaining benchmark against which to evaluate the stance of expenditure policy and then of overall fiscal policy. Aruwa (2012) observes that such knowledge could help to assess the impact on government expenditures and then on deficits arising from a structural deceleration in or from an improvement in the growth potential. Egunjobi (2013), *on the other hand, asserts that* rising government expenditure has not translated to meaningful development because the rate of poverty is still very high, especially in the face of huge corruption and diversion of public funds for selfish purposes. According to Wagner's law, as the per-capita incomes, growth,

urbanisation and increased enlightenment on the part of the electorate increase, so will the relative share of public sector in national output. An expansion of state expenditures will come about with respect to the administrative and protective functions of the state. These increases he argued are the result of the inevitable centralisation of economic functions and increasing complexities in legal relationships. In the same vein, Nwezeaku (2010) notes that public expenditure must increase as a result of the need to increase economic development in cases where there is evidence of market failure. Thus, there is benefit in continually assessing the extent to which government expenditure and revenue have contributed to enhancing economic development.

So many empirical studies have therefore been conducted to examine the impact of public financial management on economic growth (see for example, Ram, 1986; Barro, 1990; Anwar, Davies and Sampath, 1996; Nwezeaku, 2010; Gurgul and Lach, 2011; Sevitenyi, 2012; Odior and Alenoghena, 2014). The motivation for these empirical studies is underscored by the relevance of both public revenue and expenditure on economic development. While some of these studies provide evidence of negative relationship between public expenditure and economic development, others find that government spending on development sector plays significant role towards economic performance of the country and improve welfare of its citizens. Any decrease in government development spending affects country's economy negatively and hurts welfare of the citizens. Barro (1990), for example, show that expenditure on investment and productive activities of both government and private sector should contribute positively to growth, whereas government consumption spending is anticipated to be growth retarding. Ram (1986) posits government provides public goods and services which enhance the productivity of private sector inputs, harmonizes conflicts between private and social interests, and prevents exploitation by foreigners. This implies that government expenditures are critical in the process of economic development and increased government expenditure is a necessary condition for growth in output.

The objective of this paper is to examine the impact of public financial management, proxied by government revenue and expenditure, on economic development using a developing country data. The findings of this study will be useful policy makers working on fiscal policy and fiscal management as they need a good understanding of how the revenue and expenditure sides of the budget impact economic development. It will equally contribute to increase our knowledge of the relationship between public financial management and economic growth in a developing country as well as serve as a useful reference material to future researchers. The remainder of the paper is organised as follows. Section 2 presents the empirical literature. Section 3 embodies methodology and data. Section 4 presents the empirical results and discussions, and section 5 concludes the paper.

2. Theoretical and Empirical Review

2.1 Theoretical Review

There are numerous theoretical postulations which have attempted to verify the relationship between revenue, expenditure and economic development. Several of them offer different, often conflicting, views. Wagner and Keynes propositions, for example, present two opposite perceptions in terms of the relationship between public expenditure and growth in national output. Peacock and Wiseman provide explanation to public expenditure growth and government revenue. While according to Wagner (1890) causality runs from growth in national output to public expenditure, the Keynesian approach assumes that causality runs from public expenditure to growth in national output in times of recessions.

Several alternative models of government finance characterise the interaction between expenditures, revenues and economic development. Endogenous growth theory postulates that economic growth depends primarily on endogenous factors, such as human capital,

innovations, knowledge, and positive externalities (Romer (1994). The endogenous growth theory holds that policy measures within an economy, such as revenue allocations positively influence the long-run growth rate of an economy. The theory provides a basis for governments to actively foster growth due to market failure. As a result, private factor productivity and the accumulation of physical capital and human capital respectively can be increased. Public inputs, natural monopolies or spillover effects are the main justifications for government provision. In theory, these publicly provided goods enter the production function so that they can boost economic growth (Barro and Sala-i-Martin, 1992).

2.2 Empirical Review

Many empirical studies have examined the relationship between public revenue, expenditure and economic development. While some of the studies dealt with individual countries, others concentrate on group of countries using time-series and cross-country data. A handful of the studies relate aggregate public expenditures to economic growth; others focus on the relationship between certain expenditure components, such as public investment, education or health expenditures, or their components, and economic development. The results vary significantly as for some countries the government expenditure was found to have positive impact on economic development, while for the others government expenditure negatively impact economic development. The variety of conclusions depends on differences in the political and economic systems of the countries under study. Saunders (1985), for example, performs an analysis of links between economic growth and public expenditure for OECD countries for the period 1960–1981. In general the results of this study provide evidence of causality running in opposite direction; whereas Ghura (1995), using pooled time-series and cross-section data for 33 countries in Sub-Saharan Africa for the period 1970-1990 produce evidence that points towards the existence of a negative relationship between government consumption and economic growth.

One of the most extensive research projects about the linkage between public expenditure and economic growth was conducted by Anwar *et al* (1996). The authors examined 88 countries using unit root and cointegration techniques over the period 1960–1992. They find unidirectional causality in 23 cases and bidirectional causality in 8 cases. The main conclusion arising from their contribution is that, for majority of countries analysed, the causality between GDP and public expenditure does not run in any direction.

Narayan and Smyth (2006) examine causal relations between higher education, real income and real investment. The results from the study show an increase in the rate of graduation from higher education has a positive effect on real income growth and on real investment.

In their study, Olugbenga and Owoye (2007) investigate the relationship between government expenditure and economic growth in a group of 30 Organisation for Economic Co-operation and Development countries for the period ranging from 1970 to 2005 using autoregressive distributed lag bounds test approach to cointegration based on Unrestricted Error Correction Model. The results of their analysis show that a long-run relationship exists between government expenditure and economic growth. They also show evidence of unidirectional causality from government expenditure to growth for 16 of the countries, thus supporting the Keynesian hypothesis government intervention. But, causality runs from economic growth to government expenditure in 10 of the countries, thereby confirming the Wagner's law. For the remaining four countries, their findings indicate existence of feedback relationship between government expenditure and economic growth.

Liu-Chih, Hsu and Younis (2008) examine the causal relationship between GDP and public expenditure for the period ranging from 1947 to 2002 using United States data. The causality results reveal that while total government expenditure causes growth of GDP, the

latter does not cause expansion of government expenditure. The study concludes that since public expenditure grows the US economy, based on the causality test, Keynesian hypothesis exerts more influence than the Wagner's law in US.

Nwezeaku (2010) investigate the relationship between public sector financial management and economic development of Nigeria and Ghana by employing ordinary least squares technique on annual data ranging from 1980 to 2006 for the two countries. Also, he made use of the Gini index theory as a measure of the degree of inequality of income distribution. The findings of his analysis indicate, among others, a highly significant causality between public sector financial management and persistent economic underdevelopment. His results suggest that management of inflation, government revenue; government expenditure and investment appear to have the greatest negative effects on the efforts of these governments especially that of Nigeria. He recommends that sub-Saharan African economies should pay particular attention to the management of these variables to reverse the trend.

Loto (2011) investigates the growth effect of government expenditure on economic growth in Nigeria over the period covering from 1980 to 2008, with a particular focus on sectoral expenditures. His study was based on the use of five key sectors; security, health, education, transportation and communication and agriculture. His results indicate that in the short-run, expenditure on agriculture is negatively related to economic growth. The expenditure on educational sector is observed to be negative but not significant. He also reports that the impact of health expenditure on economic growth is positive. Finally, he shows that while the expenditures on national security, transportation and communication are positively related to economic growth, their impacts were not statistically significant.

Gurgul and Lach (2011) investigate the causal links between different kinds of budgetary expenditure and the economic growth of Poland. The empirical analysis was based on both the linear and nonlinear Granger causality tests and the aim was to evaluate the applicability of Wagner's Law and contrasting theory formulated by Keynes. They based their study on aggregate and disaggregate quarterly data with the sub-division of public expenditure on human resources (HR), physical resources (PR), net interest payment (NIP) and other remaining budgetary expenditure (OTHER) for the study period ranging from Q1 2000 to Q3 2008. Linear causality analysis shows that relation between total budgetary expenditure and economic growth is consistent with Keynesian theory. However, the results of the sub-categories are mixed. While some provide support for Keynesian theory (NIP), Wagner's Law (OTHER), none support HR and PR. Results of nonlinear causality analysis performed for unfiltered data also provided some support for Keynesian theory (HR and OTHER).

Nworji, Okwu, Obiwuru and Nworji (2012) investigate the impact of public expenditure on economic growth in Nigeria. Their results show that capital and recurrent expenditure on economic services had insignificant negative effect on economic growth during the study period. Also, capital expenditure on transfers had insignificant positive effect on growth. But capital and recurrent expenditures on social and community services and recurrent expenditure on transfers had significant positive effect on economic growth.

Joseph (2012) employs the ordinary least square technique in his study of the relationship between public expenditure and industrial sector productivity in Nigeria. His model was based on the use of the index of industrial production as a proxy for industrial productivity, and total government expenditure, government expenditure on administration, government expenditure on economic services, and government expenditure on social and community services and government expenditure on transfer as proxies for government expenditure. His results indicate that both government expenditure on administration and expenditure on economic services have negative impact on industrial productivity.

Sevitenyi (2012) evaluates the direction of causality between government expenditure and economic growth in Nigeria using annual data between 1961 and 2009, using co-integration tests and Granger Causality test. The results from causality test indicate that there is unidirectional causality running from total government expenditure to economic growth. At the disaggregate level, his results reveal that all the variables except total recurrent expenditure cause economic growth, implying that government expenditure promotes growth in Nigeria. He thus conclude that his findings do not support the existence of Wagner's law both at the aggregate and the disaggregate levels in Nigeria.

Pere and Buseni (2013) examine the extent to which local government financial management has impact on effective and judicious use of public financial resources in Bayelsa state using descriptive and survey methodology. Based on analysis of responses, they conclude that local government financial management has positive impact on effective and judicious use of public financial resources in Bayelsa State.

Egunjobi (2013) analyses the relationship between public consumption, private investment, public investment, total expenditure and economic growth using cointegration and causality tests on annual data spanning from 1977 to 2008. The results show that private investment and public investment positively impact on economic growth while total expenditure and public consumption impact negatively on economic growth. Also, a long run relationship exists between economic growth and public consumption, private investment, public investment and total expenditure. Again the study finds a unidirectional causality between economic growth and total expenditure, while there is no causal relationship between private investment and public investment in Nigeria. He recommends that government should focus spending on infrastructures and human capital and that there is the need for practical complementarities between the private sector and public sector.

Ifere, Okoi and Eko (2014) observe that the persistent public outcry in recent times over the perceived unnecessarily large expenditure on the Nigerian national assembly, and the question of the extent of their contribution to the overall growth of the nation is worrisome. As a result, they investigate the relationship between expenditure on the National Assembly and the level of economic growth in Nigeria using the ordinary least square estimation technique on time series data from 1999 to 2012. Their findings reveal that expenditure on the national assembly has a significant impact on level of economic growth (proxied by GDP), while a significant relationship exist between the contribution of National Assembly (proxied by number of bills passed) on economic growth. This calls for passage of more meaningful bills to drive the Nigerian economy higher.

Osuala and Jones (2014) study the impact of fiscal policy on economic growth in Nigeria using Autoregressive Distributed Lag model on time series data from 1986 to 2010. They find that there is evidence of long run equilibrium relationship between fiscal policy and economic growth in Nigeria during the period studied. Specifically, fiscal policy variables that have significant and positive impact on economic growth in Nigeria are government recurrent and capital expenditures. Non-oil taxes and government total debts have no significant impact on real GDP. Only capital expenditure has short run equilibrium relationship with economic growth. They recommend that government should establish a strong fiscal responsibility and transparency system in the fiscal institutions; and tax reforms should be such that would encourage increase in investment and fight corruption. Government debts should be channeled towards provision of critical infrastructure so as to provide the enabling investment environment, while fiscal policy should be complemented with the use of effective monetary policy.

Odior and Alenoghena (2014) investigate the effect of public sector financial management on gross production in Nigeria. The study starts with the review of some theoretical and empirical literature as concerning the public financial management. After

examining the stochastic characteristics of each time series by testing their stationarity, the study used predictive causality test, a two-stage least squares an instrumental variables approach for data set from 1970 to 2012. The findings were reinforced by the presence of static equilibrium relationship, as evidenced by the two-stage least squares. Results suggest that time limits set for the realization of these goals would encourage commitment, probity, accountability and transparency by public funds managers. Particular attention needs to be directed to the management of these variables to reverse the current trend. The study therefore, concludes that effective public sector financial management in Nigeria must consider the behavioural pattern, the social context, as well as time limits set for the realization of set goals. This will encourage commitment, probity, accountability and transparency by public funds managers.

While numerous empirical studies have analysed the relationship between public expenditure and economic development, very few studies have concentrated on the impact of public revenue on economic development. Ebimobowei (2010) evaluates the effects of fiscal policy on the economic growth in Nigeria using annual data for the period covering 1991 to 2005. Specifically he examines the contributions of tax revenue, government debts, government recurrent expenditure, government capital expenditure, government recurrent budget, and government capital budget to the gross domestic product. The results of the study indicate that a significant relationship exists between the explanatory variables taken together and gross domestic product, and no significant relationship between the specific explanatory variables contributing to gross domestic product except government recurrent and capital expenditures. He concludes that the achievement of economic growth through fiscal policy in Nigeria is a mirage as a result of inconsistencies in government policies, wasteful spending, corruption and poor policy implementation.

Aruwa (2012) examine the relationship between government revenues and expenditures, expenditures and economic growth using cointegration and VAR-based Error Correction Models on annual data ranging from 1979 to 2008. He reports that growths in both real gross domestic and government revenue causes growth in government expenditure. He concludes that government expenditure is not employed as a fiscal instrument and the revenue growth drives the government expenditure for the study period. He recommends that the volatility in oil-driven revenue profile of Nigeria requires public expenditure management reforms and the need to check the productiveness of government expenditure and diversify the revenue drive.

Dang (2013) examines the impact of revenue allocation on economic development in Nigeria using Error correction model and Pair-wise Granger Causality test on time series data for the period 1993 to 2012. The study's findings show that revenue allocations have significant causal relationship with economic development in Nigeria, with only revenue allocation to states having significant negative relationship. Unidirectional causality runs from revenue allocations to real GDP in Nigeria. All variables of the study are cointegrated and have a long-run relationship that 87.62% of the short-run disequilibrium is corrected yearly. The study recommends among others that more financial control and value for money audit should be carried out to minimize wastages and corruption in the states of the federation, so as to change the direction of influence of states' revenue allocation on economic development. Ayuba (2015) analyses the impact of non-oil tax revenue on economic growth in Nigeria using the Ordinary Least Squares Regression model on annual data ranging from 1993 to 2012. The results show that there exists a positive impact of non-oil tax revenue on economic growth in Nigeria. He recommends among others that efforts should be intensified by the government at all levels towards increased collection of non-oil taxes especially from the informal sector since this increase has the capacity to growth the economy.

Aregbeyen and Kolawole (2015) examine the relationships between oil revenue, government spending, and economic growth in Nigeria using Ordinary Least Square, cointegration, Vector Error Correction Model, and Granger causality on annual series ranging from 1980 to 2012. Findings from their analysis reveal that oil revenue Granger cause both of total government spending and growth, while there was no-causality between government spending and growth in the country. They recommend that government should increase spending on capital projects as well as intensify efforts at increasing output in the oil sub-sector in order to boost economic growth in Nigeria

3. Methodology and Description of Data

3.1 Description of Data

The data for this study comprises of annual public financial management proxied by the total annual revenue and expenditure of the Federal Government of Nigeria as well as the yearly series of nominal *GDP*, which is a proxy for economic development. All the series were obtained from the statistics database of Central Bank of Nigeria. The period under consideration ranges from 1981 to 2013. The series were converted to growth rates at time t , proxied by the difference change in the individual series as follows:

$$G_t = (S_t / S_{t-1} - 1) \quad (1)$$

Where, G_t represents the growth rates for individual series under study in year t , and S_t is a vector of the annual series of the variables (i.e., public financial management and economic development).

3.2 Methodology

To investigate impact of public financial management on economic development in Nigeria, I employ descriptive analysis and regression analysis. Descriptive analysis is the presentation of summary of the important statistics in a data set. Our descriptive statistics involve plotting of time series graph and computation of mean, standard deviation, skewness, kurtosis, and Jarque-Bera statistic as well as unit root test for the level and growth series of public financial management market and economic development proxies. While the mean presents information on the average of the public financial management and economic development series, the standard deviation shows the level of variation of the series from their average. The skewness and the kurtosis provide insight into their distributional pattern. The regression analysis, on the other hand, was conducted using multiple ordinary least square (OLS) regression method. The multiple regression technique enables the measure of the impact of independent variable(s) (X) on the dependent variable (Y). It is specified as follows:

$$GDP_t = \lambda_0 + \lambda_1 FR_t + \lambda_2 FE_t + \lambda_3 INF_t + \varepsilon_t \quad (2)$$

The *a priori* expectation of the slope coefficient is: $\lambda_1 > 0$, $\lambda_2 > 0$.

Where GDP_t is the dependent variable and is the observations of yearly nominal gross domestic products at time t , FR_t and FE_t denote the annual observations of the public revenue and expenditure at time t , λ_1 and λ_2 are the coefficients of the public financial management variables and indicates their effects on economic development, and ε_t is the stochastic error term at time t . Statistically significant slope coefficients (λ_1 and λ_2) will indicate that public financial management impacts economic development in Nigeria. The sign of the coefficient will show that nature of impact – that is, whether negative or positive.

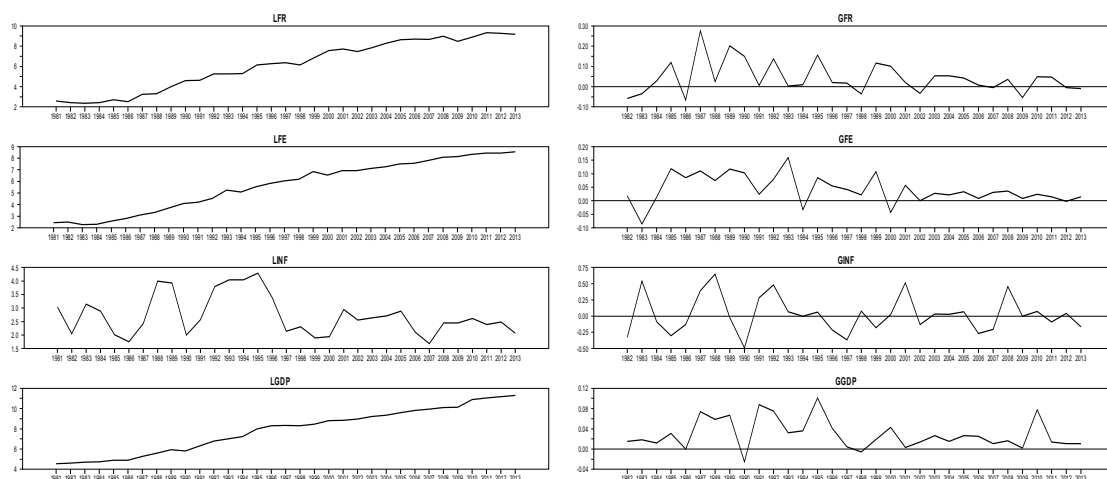
4. Empirical Results and Discussions

4.1 Graphic Presentation

Figure 1 displays a time series graph of the relationship between growth in public financial management and growth rate in economic development. Notice from this figure that the movement in public financial management and economic growth are not exact. While the public financial management had negative change in the first quarter of 1983, economic growth remained positive. Similar movement is also notice in first quarter of 1994 and 2000. From 2003, however, their movements appear to be related.

FIGURE 1: Graph of Level and Growth Rate Public Financial Management and Economic Development

January 2003 to December 2014



4.2 Descriptive Statistics

Descriptive statistics of the public financial management and economic development series are presented in *Table 1* below. From *Table 1*, notice that the average *FR*, average *FE* and average *GDP* are ₦2578.30, ₦1217.43 and ₦13336.07 respectively for the sample period. However, the sample mean for growth rates of *FR*, *FE* and *GDP* are 0.016, 0.041 and 0.029 respectively. The standard deviations are 0.019, 0.052 and 0.029 for *FR*, *FE* and *GDP* respectively. The skewness and kurtosis coefficients under normality assumption are zero (0) and three (3) respectively. But the skewness coefficients for growth rates of *FR*, *FE* and *GDP* are 0.101, 0.061 and 0.813 respectively. The kurtosis coefficients for growth rates of *FR*, *FE* and *GDP* are 0.559, 0.271 and 0.100 respectively. The *p*-values show that the excess kurtoses of all series are zero, suggesting that series are not leptokurtic. In the same vein, the Jarque-Bera statistics suggest that *FE* and *GDP* appear normally distributed but that *FR* series are not normally distributed.

Table 1: Descriptive Statistics

Variable	Mean	Std Dev	Skewness	Kurtosis	J-B Stat.	Obser.
GDP	13336.07	21816.24	2.094*	3.468*	40.661*	33
FR	2578.30	3474.93	1.284*	0.442	9.346*	33
FE	1217.43	1602.46	1.353*	0.585	10.548*	33
INF	20.370	18.276	1.613*	1.466	17.266*	33
Panel B: First Differenced Series						
GGDP	0.029	0.029	0.813	0.100	3.540	32
GFR	0.016	0.019	0.101	0.559	8.973*	32
GFE	0.041	0.052	0.061	0.271	0.118	32
GINF	0.025	0.284	0.580	-0.186	1.844	32

Note: GDP is the nominal GDP. FR is the total revenue of the Federal Government in Nigeria. FE is the total expenditure of the Federal Government in Nigeria. GGDP is the growth in nominal GDP, GFR is the growth in revenue, GFE is the growth in public expenditure and GINF is the growth in inflation rate. *, **, *** indicate significance at the 1%, 5% and 10% levels respectively.

4.3 Unit Root Test Results

The Augmented Dickey-Fuller (ADF) test is conducted to determine whether the variables under study are stationary or not. Granger and Newbold (1974) show that regression analysis between two nonstationary series could lead to a spurious or nonsense result. This means that one could find statistically significant relationship whereas *a priori* there should be none. Table 2 presents the results of unit root tests performed on log-level and growth rates of public financial management and GDP series. All the variables contain unit root at their levels but at first difference there is no unit root at 5% significance level. The ADF results therefore indicate that the series require first differencing to achieve stationarity, that is they are *I*(1) variables.

Table 2: Unit Root Test Results

	GDP	FR	FE	INF	Test
Level	-2.313 {-3.551}	-1.924 {-3.551}	-0.741 {-3.556}	-3.966* {-3.556}	ADF
Diff.	-5.463** {-3.556}	-6.876** {-3.556}	-5.392** {-3.556}	-5.928** {-3.561}	ADF

Note: The trace bracket { } embodies the 5% critical value. * and ** indicate 5% and 1% significance level respectively.

4.4 Regression Results

The summary of the results for the OLS model specified in equation (1) are presented in Table 3 below. As Table 3 shows, there is a positive and significant relationship between the growth in public revenue and economic development in Nigeria. This is evident in coefficient of the public revenue parameter (0.174) with *t*-statistic and *p*-value stood at 2.641 and 0.013 respectively. With 99% confidence, these results clearly show that public revenue contributes positively to economic development in Nigeria. The value of the coefficient of determination (R^2) stood at 0.695. This indicates that 70% of the total variation in economic development is accounted for by the public financial management and inflation, and the remaining 30% of the variation is accounted for by other variables not included in the model. The Durbin-Watson coefficient (2.134) indicates that there is no first order serial correlation in residuals. This result is in agreement with earlier empirical findings on the relationship between public revenue and economic growth. Dang (2013), for example, reports among others, that revenue have significant causal relationship with economic development in Nigeria.

Public expenditure coefficient, on the other hand, is not statistically significant. This implies that public expenditure does not significantly impact economic growth in Nigeria. Lack of statistical significance between public expenditure and economic development is not surprising. This is because of bureaucratic bottleneck and corruption that characterise the Nigerian public sector. As a result of these economic ills, the funds that are budgeted for public goods, such infrastructure facilities, that are supposed to enhance economic development, may end up in private pockets of corrupt public officials. Again, the results agree with some empirical findings. Pere and Buseni (2013), for example, reports that government expenditure on administration and economic services have negative impact on industrial productivity. Egunjobi (2013) also reports among others that total expenditure and public consumption impact negatively on economic growth

Table 3: Regression Results

Variable	Coefficient	<i>t</i> -statistic	<i>p</i> -value
Constant	0.020	3.687	0.000
GFR	0.174	2.641	0.013
GFE	0.001	0.015	0.987
GINF	0.039	2.500	0.018

$R^2 = 0.695$, $F(3, 28) = 5.962 [0.002]$, $DW = 2.134$

Table 4 presents the results of diagnostic tests conducted to ascertain robustness of the estimated regression model. Observe from the *Table 4* that the Ljung-Box Q-statistic for the residuals (ϵ_t), and McLeod-Li statistic for squared residuals are not significant. These suggest that there is no correlation in the residuals and squared residuals. Consequently, there seem to be no specification error in the model.

Table 4: Diagnostic Tests

	Statistic	<i>P</i> -value
Ljung-Box Q(8)	8.535	0.382
McLeod-Li(8)	6.344	0.608

5. Conclusions

Given the importance of public financial management for effective and sustainable economic development and public service delivery, this paper examines the impact of public financial management on economic development in Nigeria using regression analysis. The data for analysis were obtained from the statistics database of Central Bank of Nigeria and covers the period 1981 to 2013. The results from the ADF unit root test provide evidence to show that both the public financial management and the economic development proxies are integrated of order one and require first differencing to achieve stationarity. The results of the regression model provide evidence to show that the public revenue has significant positive impact on economic development in Nigeria, whereas public expenditure does not have significant impact. Consequently, our conclusion is that effective public financial management can enhance economic development. We therefore recommend that the Federal Government of Nigeria should put in place institutions that will enhance and consolidate sound public financial management systems in Nigeria.

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