

# Budget Deficit Financing and the Nigeria Economy

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## Abstract

*The disagreement over the impact of budget deficit financing on macroeconomic variable is a key part of the controversies between the classical cum monetarist and Keynesian economists. Besides, empirical studies on the issue are yet to settle the debate. This paper is an attempt to provide empirical evidence on the relationship between deficit financing and selected macroeconomic variables in Nigeria. The study examined the sources of financing the overall budget deficits and their impact on the selected variables. Thus, the study identify External loans (EXT), Domestic Banking System (DBS), Non-Bank Public (NBP) and Other Sources (OS) as the sources of financing budget deficit in Nigeria. The effect of deficits financed from these sources were examined on selected macroeconomic variables, namely: economic growth (proxied by real GDP); Inflation Rate (INFR) and Unemployment Rate (UNPR). Annual time-series data on these variables from 1981-2013 were obtained from central Bank of Nigeria (CBN) statistical Bulletin for 2013. The ordinary least squares (OLS) method of the multiple regressions analysis was used to estimate the model while our computing device was the statistical package for social sciences (SPSS). The following were the conclusions from the study: that deficits financed from external loans have insignificant negative influence on economic growth while deficits financed from domestic sources (e.g. DBS and NBP) stimulate economic growth in Nigeria; that irrespective of the source, deficit financing have no significant influence on inflation, and that, domestic sources of financing deficits aggravate unemployment in Nigeria. It is recommended, among other things, that Nigeria should diversify and broaden its revenue base so as to reduce the country's vulnerability to negative shocks from oil revenue, and so as not to resort to deficit budgeting.*

**Keywords:** Budget deficit financing, economic growth, inflation, unemployment

## 1.0 Introduction

Macroeconomic policies are generally designed to achieve specific objectives for the economy. The policy packages most times contain policy instruments from the monetary or fiscal arena or from both. Often times, interventionist and institutional policies are used to support these two major policies.

Fiscal policies are generally formulated in the context of the annual budget. In other words, fiscal policies are generally cast in terms of projects and programmes to be executed by the government, and this is mostly done within the framework of the annual budget. The government budget on its part is the financial statement of the government's proposed expenditure and expected revenue during a particular year. The budget is thus structured into the revenue and expenditure sides. There are therefore three possibilities for the relations between the expenditure and revenue sides of the budget. When the government's proposed expenditure is exactly equal to its expected revenue, the government have a balanced budget; if the expected revenue exceeds proposed expenditure, there is surplus budget; and if government expenditure is greater than the expected revenue, there is deficit budget. Each of these three budget situations has its own implications for the economy. Deficit budget therefore can be seen as a situation where government plans to spend more in a year than the revenue it expects to collect. In this case, the government will have a budget deficit equal to the amount by which the expenditure exceeds the revenue. In other words, budget deficit is the amount of that extra expenditure the government wants to undertake above the expected revenue (Akpakpan, 1999).

When the government decides to have a deficit budget, there is the need to provide funds for the excess expenditure. That is, since a deficit budget means that the overall government expenditure is greater than its anticipated revenue accumulated through taxes, the government necessarily have to look for money from alternative sources (mostly through borrowing) to bridge the gap between its

expenditure and revenue. That is, the government have to finance the deficit. For the purpose of this study, this is referred to as budget deficit financing or simply, deficit financing.

Many developing countries undertake deficit financing as a means of achieving some macroeconomic objectives. In conventional settings, deficit financing is seen as a strategy which is mostly undertaken to address macroeconomic quagmires like depression and low output (Anyanwu, 1997). On the other hand, deficit financing still appears to be a strategy that has the tendency of aggravating inflationary pressure and crowding out private sector investments, and thereby worsening unemployment problems (Anyanwu, 1997).

In Nigeria, despite the fact that actual revenues realized are often above the budgeted estimates, huge budget deficits have been recorded over the years (Anyanwu, 1997). This lack of fiscal discipline which have resulted in ever increasing fiscal deficits have been blamed for some of the macroeconomic problems that beset the country: high and rising inflation rates, high and rising unemployment, balance of payments problems, over indebtedness and debt crisis, poor investment performance, etc (Onwiodiokit, 1999).

In recognition of the perceived over indulgence of successive Nigerian governments in deficit financing, Oluba (2008) asserts that Nigeria have been addicted to deficit financing. Available statistics from the Central Bank of Nigeria showed that from 1981 till date, it was only in 1995 and 1996 fiscal years that overall surpluses of N1.0billion and N32.0 billion respectively were recorded. The overall budget deficit increased from N103.8billion in 2000 to N301.4 billion in 2002. The value of the overall deficit declined progressively from N301.4billion in 2002 to N47.4 billion in 2008. The overall deficit rose abruptly from its value 2008 to N810.0 billion in 2009 and kept increasing to N1158.5 billion in 2011. It however fell slightly to N975.7billion in 2012 and rose again to N1153.5 billion in 2013. (Central Bank of Nigeria, 2014).

Meanwhile, the theoretical positions of the classical and the Keynesian schools of thought differ on the impact of deficit financing on the economy. While the classical economists are against fiscal deficit financing, the Keynesians are in support of it. Besides the disagreement at the theoretical level, empirical evidence from Nigeria and indeed other countries are also not in agreement over the impact of deficit financing on output, inflation, unemployment, etc.

Furthermore, most of the studies conducted on the topic made use of variables like government expenditure, government tax revenue, money supply, balance of payments, etc as part of the explanatory variables (i.e., as measures of fiscal deficits). Our argument here is that these variables do not adequately measure budget deficit financing. To fill this gap therefore, the present study investigated the effects of budget deficit on selected macroeconomic variables using the various sources of financing the overall deficit as our explanatory variables. That is, the overall deficit disaggregated into the various sources of financing it was utilized. The significance of this approach is that it will reveal the different impacts that the different sources will have on the economy. This will serve as a guide to the fiscal authorities to enable them choose the source with the least negative impact when the need arises.

Another justification for this study is the fact that the dynamic nature of the structure of the Nigerian economy, and the emergence of new set of empirical data (both occasioned by the passage of time) might have rendered the findings of some of the previous studies obsolete. Hence the need to confront the issue with fresh empirical data that will reflect current economic realities in the country.

Against this backdrop, this study examined the relationship between budget deficit financing and selected macroeconomic variables in Nigeria for the period 1981 to 2013. The selected macroeconomic variables were economic growth, inflation rates and unemployment rates.

## **2.0. Theoretical Framework and Review of Related Empirical Literature**

### **2.1. Theoretical Framework**

The subject of budget deficit financing and its effects on the economy have been characterized by a great deal of controversies. Different opinions have indeed continued to emerge on how budget deficit financing can affect economic activities. The origin of these controversies can be traced to the theoretical positions of the classical

and Keynesians schools of thought. In this section, the views of these two schools of thought are briefly examined.

### **2.1.1. The Classical Theory.**

According to Akpakpan (1999), the classical economics refers to the economic doctrine of Adam Smith and his followers, which was further developed with the works of David Ricardo, John Stuart Mill and the Reverend Thomas Malthus. The classical economic ideas were so well established and widely accepted for over a century that they were labelled, classical (Dewett, 2009). The hey-day of classical economics, according to Anyanwu (1995), was during the years 1800-1850.

According to the classical theory fiscal deficit financed by debt is largely offset by the crowding out effect of deficit financing on private sector investment, and by extension, lowers the level of economic growth. In addition to the crowding out effect on private investment, the society will have to bear the burden of increase in public debt as a result of debt financed expansion in government expenditure. This opposition to deficit financing on the part of the classical economists was based on the assumption of full employment. Obviously, if there is already full employment, any extra expenditure financed by debt or by created money is bound to create inflationary rise in prices. In sum, according to classical economic theory, excessive deficit financing can lead to poor economic performance.

### **2.1.2 The Keynesian Theory**

Keynesians are economists whose views about the functioning of the economy represent an extension of the theories of the great English economists, John Maynard Keynes (1883-1946), (Ojong and Owui, 2013). Keynesianism becomes associated with an increase level of government intervention in the economy, mostly through deficit financing and other fiscal measures to manage aggregate demand in an attempt to achieve best policy performance. They see the economy as inherently unstable and needs to be stabilized through active government intervention and/or appropriate policies of government (Anyanwu, 1993).

The Keynesians see deficit financing as an important tool to achieve a level of aggregate demand consistent with full employment. According to the Keynesian theory, an increase in government spending through the use of borrowed money cause an upward shift on the aggregate demand curve. They see the assumption of full employment by the classical theory as unrealistic. If the economy is working at less than full employment level of national income so that output gap exists in the economy, the increase in debt financed government expenditure will bring expansion on output and income.

Thus, deficit financing according to the Keynesian theory can be used to create additional employment when the economy is suffering from a deficiency of effective demand. As an instrument of recovery after recession, deficit financing can be used to mitigate against severe cyclical fluctuations (Dewett, 2009).

## **2.2 Empirical Literature Review**

In this section some of the studies conducted on the relationship between budget deficit financing and macroeconomic variables, and other related issues are reviewed.

In their study, Masayab and Ali (2009) studied the relationship between budget deficit and current account deficits in the Philippines. Applying Granger causality test on data from 1970 to 2005, the study established a strong bidirectional link between budget deficits and current account deficits.

Using Saudi Arabia as a case study, Mamodouh (2000) examined the relationship between budget deficit and trade deficit in a petroleum economy. Using annual time-series data from 1970 to 1999, the study found a unidirectional causality between budget deficit and trade deficit.

Taylor, Proano, Carvalho, and Barbosa (2012) examined the nexus between fiscal deficit, economic growth and debt for the United States of America. The study found that fiscal deficit exerts a strong positive influence on economic growth.

Utilizing VECM and variance decomposition techniques, Geogantopoulos and Tsamis (2011) examined the link between budget deficit and selected macroeconomic variables for the Greek economy for the period of 1980-2009. The macroeconomic variables they used were composite price index, gross domestic product and nominal effective exchange rate. The study established long run cointegration among the variables of the study.

Sriyan (2002) investigated the relationship between fiscal measures such as government expenditure and revenue; and output in Malaysia and Indonesia. The study indicated a strong long-run relationship between fiscal variables and output for the two countries.

Utilizing a variety of analytical techniques including Augmented Dickey-Fuller (ADF) unit root test, Johansen cointegration test and Granger causality test, Saleem, Yasir, Shehzad, Ahmed, and Sehrish (2012) studied the link between budget deficit and stock prices for Pakistan and India. Working with data from 1990 to 2010, the findings indicated long term positive causal relationship between budget deficits and stock prices for the Pakistan economy. On the other hand, a long-term negative relationship was established between budget deficits and stock prices for the Indian economy.

Adam and Bevan (2004) investigated the relationship between fiscal deficit and economic growth for a panel of 45 developing countries. The results indicated a threshold effect at a level of the budget deficit around 1.5 percent of GDP.

Arize and Malindretos (2008) studied the causal link between trade deficits and budget deficit for ten African countries. Applying popular time series methodologies, the study indicated a bidirectional long-run causality between budget deficit and trade deficit.

Fiani (1991) investigated the effects of fiscal deficits financing on economic growth in Morocco. The findings of the study indicated a positive impact of fiscal deficit on economic growth in Morocco.

Applying multivariate Granger causality test, on the Kenyan economy, Ndung'u (1995) examined the link between budget deficit, inflation rate and growth of money supply on the one hand; and money printing and inflation rate on the other hand. The results of the study showed that budget deficit affect monetary growth and, that there are both direct and indirect links between money printing and inflation in Kenya.

In Nigeria, Oyejide (1972) used the Fisher's kind of equation to study the effects of deficit financing on inflation and capital formation for the period 1959 to 1970. The findings revealed a direct correlation between inflation and measures of deficit financing.

Similarly, Akinnifesi (1984) studied the influence of deficit financing on inflation in Nigeria using time series data for the period 1960-1983. As measures of fiscal deficit financing, the study used variables such as change in money supply, change in credit to the government by the banking system, government deficit expenditure, industrial production and food price indices. The major findings from the study was that inflationary tendencies in Nigeria were jointly explained by these variables representing fiscal deficit financing.

Folonrunsho and Abiola (2006) examined the long-run determinants of inflation in Nigeria. Applying cointegration and error correction mechanism on annual time-series data for the period 1970 to 1980, the results showed that inflation in Nigeria is caused by the level of income, money supply, and public sector imbalance.

Olawunmi and Ayinla (2007) studied the impact of measures of deficit financing on economic growth in Nigeria. Applying ordinary least squares method on annual data from 1980-2004, the findings suggested that deficit financing reduced economic growth in the country.

Onwiudiokit (1999) studied the causal link between inflation & fiscal deficit in Nigeria from 1970 to 1994. Using Granger causality test, the study established that fiscal deficit caused inflation without any feedback between inflation and fiscal deficit.

Using ordinary least squares regression analysis on data for the period 1980 to 2008, Ojong and Owui (2013) examined the impact of budget deficit financing on the Nigerian economy. The major findings from the study is that budget deficit financing has a positive significant relationship with economic growth.

On their part Oladipo and Akinbobola (2011) examined the nature and direction of causality between budget deficit and inflation in Nigeria. Using the Granger causality pair wise test, the study revealed a significant causal link from budget deficit to inflation without feedback.

Wosowu (2013) analysed the relationship between fiscal deficit and macroeconomic aggregated in Nigeria from 1980-2010. The study revealed that government expenditure stimulates economic growth in Nigeria.

Similarly, Ezeabasili, Tseghe and Ezi-Herbert (2012) investigated the impact of fiscal deficit on economic growth in Nigeria. Applying unit root test, co integration test, and Engle-Granger ordinary least squares two-stage approach on annual time series data for the periods 1970-2006, the findings indicated that fiscal deficit impacts negatively on economic growth, with an adjustment lag in the system

Finally, Maji, Bagaji, Etila and Sule (2012) used Augmented Dickey-Fuller (ADF) Unit root test and Granger causality test to analyse annual data for the period 1970-2009 in Nigeria. The study which investigated the causal relationship between fiscal deficits, economic growth and money supply established that fiscal deficit granger cause economic growth and broad money supply. That is, fiscal deficits positively affect economic growth and money supply in the country.

### **3.0 Data, Method of Study, and Specification of the Models**

#### **3.1 Data Required**

The study used annual time series data for the period 1981 to 2013. They were obtained from various publications of the central Bank of Nigeria (CBN).

#### **3.2 Method of Study**

The Ordinary Least Squares (OLS) multiple regression method was used to estimate the specified models. In specific terms, the coefficient of multiple determination ( $R^2$ ) was used to test the percentage of the total variation in the dependent variables that was explained by the explanatory variables. The student t-test was used to test the statistical significance of the individual parameter estimates at 5 percent significance level. To test the significance of the overall model, the F-statistics was used while the Durbin Watson (d) statistics was used to test the degree of serial correlation of the error term (i.e auto correlation). The statistical package for social sciences (SPSS) was our computing device.

#### **3.3 Specification of the Models**

To analyse the effect of budget deficit financing on the economy, three models were built. The specifications of these models are shown below.

##### **Model 1: Economic Growth Model**

Our econometric model was built on the functional form:

$RGDP=f(EXT, DBS, NBP, OS) \dots \dots \dots 1A$  where RGDP is Real Gross Domestic Product (a proxy for economic growth), EXT is the amount of budget deficits financed from foreign loans; DBS is amount of budget deficits financed from the domestic banking system which comprises of the Central Bank of Nigeria and the deposit money banks. NBP is the amount of the deficit financed from the Non bank public sources which include insurance companies, pension and provident funds, savings and loans associations, leasing companies, unit trust, development finance institutions, discount houses, individual private investors, money and capital markets, etc. OS represents other sources which comprises of special and trust fund, excess reserves, privatization proceeds, etc. F is the functional Notation.

The ordinary least squares linear regression equation based on the above functional relation is.

$$RGDP = \beta_0 + \beta_1 EXT + \beta_2 DBS + \beta_3 NBP + \beta_4 OS + U \text{ ----- (2A)}$$

Where RGDP is the dependent variable, and EXT, DBS, NBP and OS are the independent variables. They are as earlier defined. The term  $\beta_0$  is the regression constant;  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$  are the regression coefficients of the explanatory variable while U is the error term.

### Model II: Inflation Model

The functional form is:

$$\text{INFR} = f(\text{EXT}, \text{DBS}, \text{NBP}, \text{OS}) \text{----- (1B)}$$

where INFR is inflation rate which is the dependent variable. All other terms are as earlier defined.

$$\text{The OLS regression equation is: } \text{INFR} = \beta_0 + \beta_1 \text{EXT} + \beta_2 \text{DBS} + \beta_3 \text{NBP} + \beta_4 \text{OS} + U \text{----- (2B)}$$

All the terms are as earlier defined.

### Model III: Unemployment Model

The functional form is:

$$\text{UNPR} = f(\text{EXT}, \text{DBS}, \text{NBP}, \text{OS}) \text{----- (1C)}$$

where UNPR is the unemployment rate which is our dependent variable. All other terms are as earlier defined.

The OLS regression equation based on the above functional relation is:

$$\text{UNPR} = \beta_0 + \beta_1 \text{EXT} + \beta_2 \text{DBS} + \beta_3 \text{NBP} + \beta_4 \text{OS} + U \text{.....(2C)}$$

all the terms are as earlier defined. Therefore, equations 2A, 2B and 2C were estimated using the Ordinary Least Squares (OLS) multiple regression method.

#### 3.3.1 A Priori Theoretical Expectations.

Based on economic theory, we expect the following signs of the coefficients of the parameter estimates for the 3 models.

$$\text{Model I: } \text{RGDP} = \beta_0 + \beta_1 \text{EXT} + \beta_2 \text{DBS} + \beta_3 \text{NBP} + \beta_4 \text{OS} + U$$

$$(\beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 > 0).$$

$$\text{Model II: } \text{INFLR} = \beta_0 + \beta_1 \text{EXT} + \beta_2 \text{DBS} + \beta_3 \text{NBP} + \beta_4 \text{OS} + U$$

$$(\beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 > 0)$$

$$\text{Model III: } \text{UNPR} = \beta_0 + \beta_1 \text{EXT} + \beta_2 \text{DBS} + \beta_3 \text{NBP} + \beta_4 \text{OS} + U$$

$$(\beta_1 < 0, \beta_2 < 0, \beta_3 < 0, \beta_4 < 0)$$

### 4.0 Presentation and Discussion of Estimated Regression Result

#### 4.1 Presentation of Estimated Regression Results

The results of the estimated model are presented below.

##### Model I: Economic Growth Model

$$\text{RGDP} = 279044.3 - 4.251\text{EXT} + 0.84\text{DBS} + 1.359\text{NBP} + 0.240\text{OS}$$

$$(12.282) \quad (-2.630) \quad (2.441) \quad (4.430) \quad (0.884)$$

Note: The figures in parentheses are the t-values.

$$\text{R-Squared } (R^2) = 0.828$$

$$\text{Adjusted R-Squared } (R^2) = \bar{0}.803$$

$$\text{F-statistics} = 33.627$$

$$\text{Durbin-Watson} = 0.857$$

##### Model II: Inflation model

$$\text{INFR} = 26.483 - 0.206\text{EXT} - 1.849\text{DBS} - 4.642\text{NBP} - 6.994\text{OS}$$

$$(6.581) \quad (-0.012) \quad (-0.059) \quad (-0.009) \quad (-1.639)$$

Note: The figure in parentheses are the t-values

$$\text{R-Squared } (R^2) = 0.150$$

$$\text{Adjusted R-Squared } (R^2) = \bar{0}.062$$

$$\text{F-Statistics} = 1.704$$

$$\text{Durbin-Watson} = 1.091$$

##### Model III: Unemployment Model

$$\text{UNPR} = 5.646 + 0.001\text{EXT} + 1.223\text{DBS} + 3.993\text{NBP} + 1.430\text{OS}$$

$$(8.199) \quad (-2.627) \quad (2.035) \quad (4.294) \quad (1.739)$$

Note: the figures in parentheses are the t-values.

R-Squared ( $R^2$ ) = 0.831  
Adjusted R-Squared ( $R^2$ ) = 0.807  
F-statistics = 34.415  
Durbin-Watson statistics = 1.163

#### 4.2 Discussion of Estimated Regression Results

Presented below are the results from the estimated models.

##### Model I: Economic Growth Model

Based on economic theory, the coefficients of all the explanatory variables, except that of External loans (EXT), were correctly signed. Hence the coefficients of Domestic Banking system (DBS), Non-Bank Public (NBP) and other sources (OS) turned up with the expected positive signs while the coefficient of external loans (EXT) turned up with a wrong negative sign. Therefore, while EXT is negatively related to economic growth (proxied by RGDP), DBS, NBP and OS are positively related to economic growth.

The computed t-values for EXT, DBS, NBP and OS were -2.630, 2.441, 4.430 and 0.884 respectively. The computed t-value of -2.630 for EXT is less than the critical or table t-value of -1.701 at 0.05 level of significance and 28 degrees of freedom. Hence EXT is not statistically significant. The t-values of 2.441 and 4.430 for DBS and NBP respectively are each greater than the critical t-value of 1.701 at 0.05 level of significance and 28 degrees of freedom. Hence DBS and NBP are statistically significant for OS, the computed t-value of 1.701. Hence OS is not statistically significant.

Also, from model I estimation, the coefficient of multiple determination ( $R^2$ ) was 0.828. The implication of this is that about 82 per cent of the total variations in the dependent variable (RGDP) was explained by the explanatory variable. The remaining 18 percent may be attributed to variables not explicitly specified in the model but enveloped the error term. An  $R^2$  of 82 percent is indeed a good fit.

Furthermore, the computed F-ratio of 33.627 is greater than the critical F-ratio of 2.71 at 0.05 level of significance with  $V_1 = K-1 \Rightarrow 5-1=4$  and  $V_2 = N-K \Rightarrow 33-5=28$  degree of freedom. Hence the overall model is not statistically significant.

Lastly, the computed Durbin-Watson ( $d^*$ ) statistics was 0.857. This is less than the critical d lower limit ( $d_L$ ) of 1.19 at 0.05 level of significance with  $n=33$  and  $k^1=4$ . Hence there is positive autocorrelation of the first order (Koutsoyiannis, 1977).

##### Model II: Inflation Model

On a priori theoretical ground, the coefficients of all the explanatory variable was wrongly signed. Therefore, the coefficients of EXT, DBS, NBP and OS turned up with the wrong negative signs. This implies that all the sources of financing fiscal deficits are negatively related to inflation in Nigeria.

The computed t-values for EXT, DBS, NBP, and OS were 0.012, 0.059, 0.009 and 1.639 respectively. Each of the computed t-values of EXT, DBS, NBP and OS is less than the critical or table t-value of 1.701 at 0.05 level of significance and 28 degrees of freedom. Hence, External loans (EXT), Domestic Banking System (DBS), Non-Bank Public (NBP) and Other Sources (OS) as sources of financing fiscal deficits in Nigeria are not statistically significant.

Again, from model II, the coefficient of multiple determination ( $R^2$ ) was 0.150. This implies that about 15 percent of the total variations in the dependent variable was explained by the explanatory variables while the remaining 85 per cent may be attributed to variables not explicitly specified in the model, but enveloped in the error term. This is a bad fit.

Furthermore, the computed F-ratio of 1.704 is less than the critical or table F-ratio of 2.71 at 0.05 level of significance with  $V_1 = K-1 \Rightarrow 5-1=4$  and  $V_2 = N-K \Rightarrow 33-5=28$  degrees of freedom. Hence the overall model is not statistically significant.

Finally the computed Durbin-Watson ( $d^*$ ) statistics was 1.091. This is less than the critical d lower limit ( $d_L$ ) of 1.19 at 0.05 significance level with  $n=33$  and  $k^1=4$ . Therefore, there is positive autocorrelation of the first order.

##### Model III: Unemployment Model

On a priori theoretical ground, the coefficients of all the explanatory variables were wrongly signed. Hence the coefficient of EXT, DBS, NBP and OS turned up with the wrong positive sign. This implies that all the sources of financing fiscal deficit are positively related with unemployment in Nigeria.

The computed t-values for EXT, DBS, NBP and OS were -2.627, 2.035, 4.294 and 1.739 respectively. The computed t-value of -2.627 for EXT is less than the critical t-value of -1.701. Therefore, EXT is not statistically significant. On the other hand, the t-values for DBS, NBP and OS were each greater than the critical

t-value of 1.701 at 0.05 significance level and 28 degrees of freedom. Hence DBS, NBS and OS as sources of financing budget deficit in Nigeria are statistically significant.

Again, the coefficient of multiple determination ( $R^2$ ) for model III was 0.831. This means that about 83 percent of the total variations in the dependent variable (UNPR) was explained by the explanatory variable. This is indeed a good fit.

Furthermore, the computed F-ratio of 34.315 is greater than the critical or table F-ratio of 2.71 at 0.05 level of significance with  $V_1 = K-1 \Rightarrow 5-1=4$  and  $V_2=N-K \Rightarrow 33-5=28$  degrees of freedom. Hence the overall model is statistically significant.

Finally, the Durbin-Watson ( $d^*$ ) statistics was 1.163. This is less than the critical d lower limit ( $d_L$ ) of 1.19 at 0.05 level of significance  $n=33$  and  $K^1=4$ . Therefore, there is positive autocorrelation of the first order.

## 5.0 Conclusions and Recommendations

### 5.1 Conclusions

Based on the results of the data analysis (especially, the results of t-test,  $R^2$  and F-test), we draw the following conclusions.

1. That budget deficit financed from external loans is negatively but insignificantly related to economic growth. On the other hand, deficit financed from domestic sources (i.e., domestic banking system and non-bank public) is positively and significantly related to economic growth in Nigeria.
2. That budget deficits, irrespective of the source of financing have no significant impact on inflation in Nigeria.
3. That budget deficits financed from external loans have positive but insignificant influence on unemployment. On the other hand, budget deficits financed from domestic sources (i.e. domestic banking system, non-bank public and other sources) have significant positive influence on unemployment in Nigeria.

### 5.2 Recommendations

Based on our findings and the conclusions drawn there from, we suggest the following recommendations.

1. The government should diversify and broaden its revenue base so as to reduce the vulnerability of the economy to negative shocks from oil revenue. This will ensure greater revenue to take care of government's proposed expenditure than to resort to deficit budgets to bridge the gap between proposed expenditure and actual revenue. Hence the negative consequences of deficit financing would be reduced.
2. When it is absolutely necessary to budget for a deficit, the government should try as much as possible to reduce the proportion of the overall deficits financed from external borrowing. This will reduce the amount of foreign debt and its negative consequences.
3. The government should equally reduce the proportion of fiscal deficits financed from the domestic deposit money banks to reduce the crowding-out effect on the private sector. Rather, the government should concentrate on other domestic sources like non-bank public, individual investors in the bond market, privatization proceeds, excess crude money, etc.
4. We also recommend that the government should reduce its recurrent expenditure and spend the deficit on economically viable and productive ventures that will boost economic activities and provide jobs for the teaming Nigerian labour force. This will help to reduce unemployment.
5. There should be probity, transparency, accountability and fiscal discipline on the part of government officials charged with the responsibility of executing government policies and programmes. This will ensure that money earmarked for development projects are judiciously spent.

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