MONETARY INFLATION AND FISCAL SPENDING IN NIGERIA  
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Abstracts: In Nigeria, fiscal expenditures continue to grow without a corresponding increase in revenue. This has worsened fiscal sustainability resulting in high rate of deficits and severe inflationary pressure. In this study, we examined the relationship between monetary inflation and fiscal spending in Nigeria using time series data from 1981 to 2016. Following ex post facto research design, we employ Least Squares (LS) technique in the estimation while line graph, normality test, correlation analysis were used in the preliminary analysis. Data for the model in which inflation was made a function of government recurrent expenditure, government capital expenditure and interest rate were collected Central Bank of Nigeria (CBN) Statistical Bulletin. The findings indicates that government capital spending ($\beta=-0.778665, t=-10.1298, p<0.05$) exert a significant negative effect on monetary inflation in Nigeria, money supply ($\beta=1.556819, t=2.7021, p<0.10$) exert a significant positive effect on monetary inflation in Nigeria. However, government recurrent spending ($\beta=-1.0005, t=-0.1970, p<0.10$) exerts no effect on monetary inflation in Nigeria. The result suggests that inflation do not grow with the growth in fiscal spending a results which implies that government fiscal spending has not reach a level that it can stimulate inflation and that, inflation is indeed monetary phenomena in the country. Therefore, government needs to discourage all non-productive expenditures since fiscal spending has been shown to be ineffective neither in raising aggregate demand nor stimulating inflation. Also, contractionary monetary policy as well as economic diversification and import reduction policies that can bring about stable inflation rate should be revitalised.

Keywords: Fiscal spending, Inflation, Capital spending, Recurrent spending, Nigeria

Introduction

One of the macroeconomic goals of every government is to maintain stable domestic price level in order to avoid the cost of inflation or deflation and the uncertainty
that follows where there is price instability (Salam, Salam & Feridun, 2006). At any particular point when this objective is not realised and the price level continue to rise, the purchasing power of the currency of such a country will go down against the currencies of the rest of the world (Fatukasi, 2010). To buttress this position Okimoto (2018) stated that, inflation rates significantly influence the behaviors of individuals and firms since inflation affects the value of money. However, inflationary pressure is not peculiar to country, region or race; it is a challenge that has implication on every economy (Osuala, Osuala & Onyeike, 2013). Although inflation has negative effect on economic performance when it is high, it is also destructive when it is zero because it will result in economic stagnation since economy requires a definite minimum level of inflation for economic growth (Hossain, Ghosh & Islam, 2012) referred to as non accelerating inflation rate of unemployment. Thus, to maintain a stable price level, modern government put in place policies and measure to control inflation. Economic scholars are divergent on whether inflation is a monetary or non-monetary phenomenon. Several scholars view inflation as strictly a monetary phenomenon by pointing out that inflation occurs when the rate of growth of the money supply is higher than the growth rate of the economy (Akcay, Alper & Ozmucur, 1996; Chimobi & Igwe, 2010). This is the conventional monetarist linkage from the creation of base money to inflation. In line with this perspective, inflation is seen as a condition in which the rate of growth of the money supply is higher than the growth rate of the economy (Bakare, Adesanya & Bolaarinwa, 2014). According to Keynesian view, government needs to spend to stabilise the economy, stimulate or enhance productivity or investment through direct public spending and investment. Government also spends in order to redistribute income between the rich and poor. However, in line with the view of neo-Classical economists, increase in government spending in form of intervention could result to high inflation outcomes given the full-employment assumption (Olayungbo, 2013). There is also controversy on the direction of casuality between fiscal spending and inflation. An increase in government spending may raise inflation and inflationary pressure may also translate to growth in government spending in both developing and developed economies (Ezirim, Muoghalu & Elike, 2008).

One of the pronounced macroeconomic problems confronting Nigeria is the problem of inflation. It has redistributes income and wealth in favour of some, and greatly harms others as it has made the life of the poor more miserable (Egbulonu & Wobilor, 2016). Its effect on the economy is so severe that the real GDP of the country over the years is stunted. Since the 1970’s, there has been a continuous increase in inflation rate. After an appreciable economic performance in the early 1970s, the Nigerian economy witnessed some anxious moments in the late 1970s to mid 1980s. Severe pressures built up in the economy mainly because of the expansionary fiscal policy of the federal government during these years. This was exacerbated by the transfer of government sector deposits to the banks and the resultant increase in their free reserves with adverse consequences on the general price level. The inflationary pressure was further aggravated by high demand for imports of both intermediate inputs and consumer goods due to over valuation of the naira which made imports relatively cheaper than locally manufactured goods (Osuala, Osuala & Onyeike, 2013). Government of Nigeria over the years have adopted several fiscal policy measures to counteract the effect of inflation, but still the problem has been at increase, which means that despite the government’s position to have minimal single digit inflation, it seems nothing has actually been done (Egbulonu & Wobilor, 2016). Thus, fiscal
expenditures continue to grow without a corresponding increase in revenue. This has worsened fiscal sustainability resulting in high rate of deficits and severe inflationary pressure. In view of the decreasing price of crude oil in the international market accompanied by lower revenue generation, the rising inflationary pressure has continued to serve as a major obstacle to ensuring sustainable growth in Nigeria (Idris & Bakar, 2016). Against the analytical background, empirical studies on the link between fiscal spending and monetary are sparse especially in the developing countries of Africa with Nigeria inclusive. Prior studies in Nigeria have focused their study on the relationship between government spending and economic growth and the relationship between fiscal deficit and inflation rate (Olayungbo, 2013). The limited existing studies in Nigeria on public expenditure growth and inflation (See Olayungbo, 2013; Nyambe and Kanyeumbo, 2015; Ojarikre, Ezie and Torka, 2015) failed to account for the implication of money supply on inflation and or the distinct effect of the two main components of fiscal spending on inflation which are two critical issues essential for the formulation of monetary and fiscal policy to combat the prevailing inflationary trend in the country. It is against this background that this study investigates the relationship between monetary inflation and fiscal spending in Nigeria. The specific objectives of the study are to: Analyse the trend of inflation and fiscal spending in Nigeria; evaluate the relationship between inflation and fiscal spending in Nigeria and; investigates the direction of causality between inflation and fiscal spending in Nigeria. The uniqueness of this study is that the outcome will assist in re-designing fiscal policy in Nigeria in a way that it can be used stimulate aggregate demand and control inflation. Specifically, the study will help in restructuring the tools of fiscal policy especially government fiscal spending with a view to diversify the economy, reduce the existing high inflation rate and also raise the living standard. The study would serve as a tool and a guide towards the formation of policies and how they are implemented to help curb the problem of inflation in the country and increase growth. This study would also encourage the government to see the need for a serious reconsideration of its policies in a way avoid wastages and best enhances citizens’ well-being. This introduction section is followed by literature review, methodology after which we present the empirical results, discussion and conclusion.

Literature Review

In this section, we conceptualized monetary inflation and fiscal spending drawing evidence from existing studies and theories. Mishkin (2008) define inflation is the rate at which the general level of prices for goods and services is rising, and, subsequently, purchasing power is falling. According to Akofio-Sowah (2009) inflation is the percentage change in the local currency import prices resulting from a one percent change in the exchange rate between the importing and the exporting country. Jhingan (2005) refers to inflation as a persistent and appreciable rise in the general level of prices. It is a sustained or continuous rise in the general price level or alternatively, as a sustained or continuous fall in the value of money. Inflation is associated with rising price. It is a situation in which there is a continuous fall in the value of money as there is too much money chasing after too few goods (Lotfalipour, Montazeri and Sedighi, 2013). Inflation may result from the demand pull when aggregate demand is greater than aggregate supply, cost push when there is increase in the cost of production, structuralist when there is structural rigidities,
market imperfection and social tension and monetarists factors when increase in money supply is greater than the increase in real output (Essien, 2000). Meanwhile, Bakare, Adesanya & Bolaarinwa (2014) conceptualised monetary inflation from the conventional monetarist linkage perspective which sees inflation as a condition in which the rate of growth of the money supply is higher than the growth rate of the economy. In line with this perspective, inflation is defined as a sustained increase in the supply of money by the monetary authority of a country. On the other end, government fiscal spending or expenditure refers to expenses incurred by the government for the maintenance of itself and provision of public goods, services and works needed to foster or promote economic growth and improve the welfare of people in the society. Government (public) expenditures are generally categorized into expenditures on administration, defense, internal securities, health, education, foreign affairs, etc. and it has capital and recurrent components as well as productive and unproductive components. Productive expenditures are in form of investment which helps the economy to improve her productive capacity while the unproductive versions are expenditures in form of consumption (Bhatia, 2002).

In the theoretical literature, theory is replete on the determinant of inflation and its implication on the economy and basic economic variables. According to demand pull theory, an excess in aggregate demand over aggregate supply will generate inflationary rise in money. The theory states that at full employment, doubling money supply, price level will double. In cost-push inflation theory, inflation result from wage increases enforced by unions and profit increases by employers. This type of inflation is now known as the “New Inflation”. Modern quantity theorists led by Friedman hold that “inflation is always and everywhere a monetary phenomenon”. Hence, the higher the growth rates of nominal money supply, the higher the rate of inflation. A modification in the quantity theory of money is traceable to Irving Fisher’s famous equation of exchange: MV= PQ where he emphasized that any change in the quantity of money affects only the price level or the monetary side of the economy, with the real sector of the economy totally insulated. This indicates that changes in the supply of money do not affect the real output of goods and services. According to the Keynesian theory, the relationship between changes in the quantity of money and prices is non-proportional and indirect, through the rate of interest. The strength of the Keynesian theory is its integration of monetary theory on the one hand and the theory of output and employment through the rate of interest on the other hand. Thus, when the quantity of money increase, interest rate falls leading to an increase in investment and employment. In other words, the Keynesians see a link between the real and the monetary sectors of the economy, an economic phenomenon that describes equilibrium in the goods and money markets (IS-LM). Accordingly, so as long as there is unemployment, output and employment will change in the same proportion as the quantity of money, but there will be no change in prices.

Against the empirical background, several studies have examined the relationship between government spending and economic as well as fiscal deficit and inflation nexus across countries to capture the link between fiscal spending and inflation empirically. For instance, Nguyen (2014) using cointegration and Vector Error Correction Model investigates the long-run and short-run impact of government spending on inflation in three Asian emerging economies including India, Indonesia and Vietnam for the period 1970-2010. The results show that the differences in institutions and governance system of these countries hardly affect the long-run impact of government spending on inflation. In the
short-run, a cointegrating relationship was found between government spending and inflation, which is either a direct or an indirect link through interactions with GDP per capita or nominal exchange rate. In a similar vein, Okimoto (2018) employed smooth transition Phillips curve model to examined the dynamics of trend inflation in Japan over the last three decades based on the. The study found that there is a strong connection between the trend inflation and monetary policy regimes. The results also suggest that the introduction of the inflation targeting policy and quantitative and qualitative easing in the beginning of 2013 successfully escaped from the deflationary regime, but were not enough to achieve the 2% inflation target. Finally, the results indicate the significance of exchange rates in explaining the recent fluctuations of inflation and the importance of oil and stock prices in maintaining the positive trend inflation regime.

In another study, Conti Neri and Nobili (2017) quantify the contribution of a set of structural shocks, identified by means of sign restrictions using a Bayesian VAR, to inflation and economic activity. A country analysis confirms that the negative effects of oil supply and monetary policy shocks on inflation was widespread, albeit with different intensity across countries. The ECB unconventional measures since 2014 contributed to raising inflation and economic activity in all the countries. All in all, our analysis confirms the appropriateness of the ECB asset purchase programme. Similarly, Pfajfar and Zakelj (2017) explore the interaction between the formation of inflation expectations and monetary policy design using laboratory experiments within a New Keynesian framework. The findings suggest that, instrumental rules that use actual rather than forecasted inflation produce lower inflation variability and reduce expectational cycles. It also show that forward-looking Taylor rule where a reaction coefficient equals 4 produces lower inflation variability than rules with reaction coefficients of 1.5 and 1.35. Inflation variability produced with the latter two rules is not significantly different. Moreover, the forecasting rules chosen by subjects appear to vary systematically with the policy regime, with destabilizing mechanisms chosen more often when inflation control is weaker.

In Nigeria country specific studies, Olayungbo (2013) examines asymmetry causal relationship between government spending and inflation in Nigeria from the period of 1970 to 2010. The asymmetry causality test shows that a uni-directional causality exists from negative government expenditure changes (low or contractionary government spending) to positive inflation changes (high inflation) in the Vector Autoregression (VAR) model. In a similar vein, Egbulonu and Wobilor (2016) using Ordinary Least Square (OLS) Regression and Error Correction Mechanism examined the relationship between fiscal policy and inflation rate in Nigeria from 1970 to 2013. The results found a statistically insignificant positive relationship between government expenditure; government tax revenue and inflation in Nigeria, while government debt stock is positive and statistically significant. The results also reveal that, there exist a long-run equilibrium relationship between inflation and fiscal policy in Nigeria. Nyambe and Kanyeumbo (2015) ascertain the role that government expenditure, household expenditure and inflation plays in growing the Namibian economy using time series annual data for the period 1980 to 2014. The results show the existence of a positive relationship between economic growth, government expenditure, household expenditure and inflation. However, inflation has a negative relationship with economic growth and has at-statistics of -3.258. In another study, Ozoh, Uma and Odionye (2016) employed autoregressive Distributed Lag (ARDL) bounds testing which is based on the estimation of an Unrestricted Error Correction Model to
ascertain the influence of fiscal policy on unemployment and inflation reduction in Nigeria. The findings revealed that federal government capital expenditure in the first and second year does not reduce unemployment rate but it does significantly in the third year. Petroleum profit tax and company income tax do not significantly reduce inflation but only custom and excise duty did. The joint effect of all the tax variables was significant in inflation control. Similarly, Ojarikre, Ezie and Torka (2015) examined empirically the causal relationship existing between public expenditure growth and inflation in Nigeria from 1981 to 2012. Employing modern time series econometric techniques such as; Augmented Dickey-Fuller (ADF) Unit Root test, Johansen Co-integration test and the Granger Causality test. The study provides evidence that there is no statistically discernible relationship between government expenditure growth and inflation in Nigeria.

Methodology

The study employs the descriptive research design. The choice of this research design is connected with the fact that it makes impossible to manipulate the variables of interest. This study is anchored on the conventional theoretical framework which supports the correlation between fiscal policy and inflation. Within the conventional theoretical framework, Sargent and Wallace (1981) pointed out the “unpleasant monetarist arithmetic”. They suggest that because of the inter-temporal government budget constraint, central bank’s commitment to price stability will force fiscal authority to act accordingly and keep inflation under control. We have the inter-temporal government budget constraint stated as:

\[ sf + sm = b \]  \hspace{1cm} (1)

In (1), \( sf \) denotes taxes minus government spending, \( sm \) the seigniorage from government-supplied fiat currency (nominal increase in money stock), and \( b \): principal and interest on past real government debt. Equation (1) says that the present value of government revenue should equal to the present value of all the government-issued bonds in current and future periods. In other words, a government has to finance its spending either by revenue from taxes or by issuing bonds. To model the relationship between monetary inflation and fiscal spending in Nigeria, this study adapted the model used in the study conducted by Ojarikre, Ezie and Torka, (2015) on public expenditure growth and inflation in Nigeria where inflation rate was the dependent variable while, capital expenditure and recurrent capital expenditure were the independent variable. As a modification money supply was introduced as additional explanatory variables in the model in line with the focus of this study. The model in functional form is stated as follows:

\[ \text{INFL} = F(CGS, RGS, MS) \]  \hspace{1cm} (2)

The transformation of the model into an econometric model is expressed as:
INFL = Inflation
CGS = Capital government spending
RGS = Recurrent government spending
MS = Money Supply
The expected signs of the coefficients of the explanatory variables are summarized in terms of differentials as follows: Capital government spending is expected to exert indeterminate effect on inflation i.e \( \frac{\text{INFL}}{\text{CGS}} \leq \sigma \geq 0 \). Recurrent government spending is expected to exert indeterminate effect on inflation in Nigeria i.e \( \frac{\text{INFL}}{\text{RGS}} \leq \sigma \geq 0 \) and money supply is expected to exert a positive effect on inflation in Nigeria i.e \( \frac{\text{INFL}}{\text{MS}} < 0 \).

Given the nature of the models it is imperative that the data which permit the estimation of the stochastic equations can be collected. The data series covered the periods between 1981 and 2016. The data were obtained from the publication of central Bank of Nigeria, (CBN Annual Report), Statistical Bulletin, National Account and Bureau of Statistics. The secondary data used for the study shall be estimated by the ordinary least square multiple regression analytical method. In the analysis, the study used the Least Squares (LS) estimation technique. The choice of OLS as the estimation technique was based on the fact that the technique is easier to use and also has all the computing power required. Another main reason why the OLS was selected is that OLS results have desirable characteristics. In the preliminary analysis, the data and model were assessed using Jarque-Bera test for normality, the test for multicorrelation and the line graph

Results, Conclusion and Recommendations

I. Pre-estimation results
   a. Descriptive analysis

The result of the Jarque-Bera test of normality is presented in table 1.

<table>
<thead>
<tr>
<th></th>
<th>INFR</th>
<th>CGS</th>
<th>RGS</th>
<th>MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>19.97500</td>
<td>372.2700</td>
<td>1047.693</td>
<td>11.89611</td>
</tr>
<tr>
<td>Median</td>
<td>12.30000</td>
<td>255.6700</td>
<td>313.8800</td>
<td>10.32500</td>
</tr>
<tr>
<td>Maximum</td>
<td>72.80000</td>
<td>1152.800</td>
<td>3831.950</td>
<td>23.99000</td>
</tr>
<tr>
<td>Minimum</td>
<td>4.700000</td>
<td>4.100000</td>
<td>4.750000</td>
<td>4.700000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>18.31039</td>
<td>376.1673</td>
<td>1331.690</td>
<td>5.010316</td>
</tr>
<tr>
<td>Skewness</td>
<td>1.494344</td>
<td>0.629473</td>
<td>1.026139</td>
<td>0.896885</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>3.954346</td>
<td>1.983581</td>
<td>2.475729</td>
<td>3.048182</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>14.76454</td>
<td>3.927083</td>
<td>6.730059</td>
<td>4.851443</td>
</tr>
<tr>
<td>Probability</td>
<td>0.000622</td>
<td>0.140360</td>
<td>0.034561</td>
<td>0.088414</td>
</tr>
<tr>
<td>Sum</td>
<td>719.1000</td>
<td>13401.72</td>
<td>37716.96</td>
<td>428.2600</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>11734.47</td>
<td>4952564.</td>
<td>62068952</td>
<td>878.6145</td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: Author, 2019

The result shows that all the variables are positively skewed since their means are greater than their medians. Except for government capital spending and money supply government recurrent spending and inflation are highly symmetrical since their skewness coefficients are greater than one. The values of the Jarque-Bera statistics show that government recurrent spending and inflation are normally distributed since their p-values
are statistically significant at 5% level of significance while both government capital spending and money supply are not statistically significant.

b. Correlation matrix

The result of the multicollinearity tests using correlation matrix to detect whether the variables are multicorrelated is presented as follows:

<table>
<thead>
<tr>
<th></th>
<th>INFR</th>
<th>CGS</th>
<th>RGS</th>
<th>MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFR</td>
<td>1.000000</td>
<td>-0.434050</td>
<td>-0.388144</td>
<td>0.484535</td>
</tr>
<tr>
<td>CGS</td>
<td>-0.434050</td>
<td>1.000000</td>
<td>0.905028</td>
<td>-0.482605</td>
</tr>
<tr>
<td>RGS</td>
<td>-0.388144</td>
<td>0.905028</td>
<td>1.000000</td>
<td>-0.484656</td>
</tr>
<tr>
<td>INTR</td>
<td>0.484535</td>
<td>-0.482605</td>
<td>-0.484656</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Source: Author, 2018

The correlation analysis of the set of variables in the model as presented in Table 2 indicates the absence of multicorrelation problem among the variables since the association among the variables is not very strong. The result also shows that the association between inflation, government capital spending government recurrent spending is negative while the association between inflation and money supply was negative.

c. Trend Analysis

The trend of monetary inflation and fiscal spending in Nigeria is presented in figure 1 below:

Figure 1: Trend of fiscal spending in Nigeria 1981-2017

Source: Author, 2019

The trend of government recurrent spending and government capital spending as shown in figure 1 indicates that both government recurrent spending and government capital spending have rose rapidly over the period. Between 1987 and 1991 government...
capital spending was above government recurrent spending. However between 1987 and 2001 government recurrent spending was above government capital spending. However between 2003 and 2017, government capital spending rose above government recurrent spending. The trend shows that inflation rate in Nigeria has fluctuated upward and downward significantly over the entire period.

d) Lag-Order Selection

The results of lag-order selection criteria for the estimated model are presented in Table 3.

Table 3: Lag-Order Selection Criteria

<table>
<thead>
<tr>
<th>Lag</th>
<th>LogL</th>
<th>LR</th>
<th>FPE</th>
<th>AIC</th>
<th>SC</th>
<th>HQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-224.4815</td>
<td>NA</td>
<td>0.000274</td>
<td>9.409070</td>
<td>9.691959</td>
<td>9.497667</td>
</tr>
<tr>
<td>1</td>
<td>32.54863</td>
<td>317.9078</td>
<td>2.73e-07</td>
<td>2.441474</td>
<td>4.421695*</td>
<td>2.961654</td>
</tr>
<tr>
<td>2</td>
<td>73.87380</td>
<td>55.49673</td>
<td>2.82e-07</td>
<td>2.143186</td>
<td>5.820741</td>
<td>3.294950</td>
</tr>
<tr>
<td>3</td>
<td>252.9278</td>
<td>66.20968*</td>
<td>3.68e-08*</td>
<td>-2.995023*</td>
<td>4.479864</td>
<td>-1.411675*</td>
</tr>
</tbody>
</table>

Source: Author, 2018

The result in table 3 indicates a maximum of 3 lag as suggested by sequential modified LR test, Final prediction error, Akaike information criterion (AIC) and Hannan-Quinn information criterion (HQ) was used in the analysis.

e. Unit root test

The Augmented Dickey Fuller (ADF) test was used to test the stationarity of the chosen variables as presented in Table 7 as follows:

Table 7: Unit root test results.

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF Test (Value)</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level</td>
<td>First Diff</td>
</tr>
<tr>
<td>CGS</td>
<td>-3.38571</td>
<td>4.59492</td>
</tr>
<tr>
<td>RGS</td>
<td>-4.55071</td>
<td>-4.23122</td>
</tr>
<tr>
<td>MS</td>
<td>-6.13949</td>
<td>-1.40293</td>
</tr>
<tr>
<td>Critical Value @ 1%</td>
<td>-2.93914</td>
<td>-2.94227</td>
</tr>
<tr>
<td>Critical Value @ 5%</td>
<td>-2.17017</td>
<td>-2.17066</td>
</tr>
<tr>
<td>Critical Value @ 10%</td>
<td>-1.78975</td>
<td>-1.78975</td>
</tr>
</tbody>
</table>

Source: Author, 2018

The result of the Augmented Dickey Fuller (ADF) test showed that all the variables in the data set were stationary at level at 5% level of significance.

II. Empirical Analysis

To determine the effect of monetary inflation on fiscal spending in Nigeria, the result of least squares (LS) regression is presented in table 4:

Table 4: Least Squares (LS) Regression

<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>LOG(CGS)</td>
<td>-0.778665</td>
<td>5.998157</td>
<td>-10.129817</td>
<td>0.0075</td>
</tr>
<tr>
<td>LOG(RGS)</td>
<td>-1.000496</td>
<td>5.072533</td>
<td>-0.197238</td>
<td>0.8449</td>
</tr>
<tr>
<td>MS</td>
<td>1.556819</td>
<td>0.576160</td>
<td>2.702059</td>
<td>0.0109</td>
</tr>
</tbody>
</table>
The resulted as presented in table 4 on the basis of student t-test of significance of the parameter estimates showed that while government capital spending ($\beta=-0.778665, t=-10.129817, p<0.05$) exerts a significant negative effect on inflation in Nigeria, money supply ($\beta=1.556819, t=2.702059, p<0.10$) exerts a significant positive effect on monetary inflation in Nigeria. However, government recurrent spending ($\beta=-1.000496, t=-0.197238, p<0.10$) showed no effect on inflation in Nigeria. The adjusted coefficient of multiple determination which was 0.874925 (87.4%) indicates that 87.4% of the variations in monetary inflation in Nigeria is explained by the explanatory variables even as the sample size expanded indefinitely. The Durbin Watson statistics which was 1.269861, shows that there is no autocorrelation in the model.

## Conclusion and Recommendations

The resulted of the findings based on student t-test of significance indicates that government capital spending ($\beta=-0.778665, t=-10.129817, p<0.05$) exert a significant negative effect on monetary inflation while money supply ($\beta=1.556819, t=2.702059, p<0.10$) exerts a significant positive effect on monetary inflation in Nigeria. However, government recurrent spending ($\beta=-1.000496, t=-0.197238, p<0.10$) showed no effect on monetary inflation in Nigeria. The adjusted coefficient of multiple determination which was 0.874925 (87.4%) indicates that 87.4% of the variations in monetary inflation in Nigeria is explained by the explanatory variables even as the sample size expanded indefinitely. The Durbin Watson statistics which was 1.769861 shows that there is no autocorrelation in the model.

The study concluded that fiscal spending exerts a significant negative effect on monetary inflation while money supply shows a positive effect on monetary inflation in Nigeria. By implication, as both recurrent and capital expenditure are rising, inflation falls against a priori expectation while inflation rises with increase in money supply in line with a priori expectation. The result suggests that inflation is indeed a monetary phenomenon in Nigeria. This submission is as result of the fact that, among the two fiscal spending components tested, only capital expenditure that was found to have a significant effect on inflation but it also fails to follow the same pattern of growth with inflation. Meanwhile, inflation was found to be growing in the same direction with money supply. This result corroborated the findings in the study conducted by Okimoto (2018) who employed smooth transition Phillips curve model to examined the dynamics of trend inflation in Japan over the last three decades based on the. The study found that there is a strong connection between the trend inflation and monetary policy regimes. The results also suggest that the
introduction of the inflation targeting policy and quantitative and qualitative easing in the beginning of 2013 successfully escaped from the deflationary regime, but were not enough to achieve the 2% inflation target. Finally, the results indicate the significance of exchange rates in explaining the recent fluctuations of inflation and the importance of oil and stock prices in maintaining the positive trend inflation regime. The result is also in line with the findings of Olayungbo (2013) on asymmetry causal relationship between government spending and inflation in Nigeria from the period of 1970 to 2010. The asymmetry causality test shows that a uni-directional causality exists from negative government expenditure changes (low or contractionary government spending) to positive inflation changes (high inflation) in the Vector Autoregression (VAR) model. However, the result was in contrast to the findings of Nyambe and Kanyeumbo (2015) on the role that government expenditure, household expenditure and inflation plays in growing the Namibian economy using time series annual data for the period 1980 to 2014. The results show the existence of a positive relationship between economic growth, government expenditure, household expenditure and inflation. However, inflation has a negative relationship with economic growth. In line with the result, the following policy recommendations are proffered for consideration: Government through a sound policy and programmes needs to discourage all her non-productive activities and expenditures since fiscal spending has been shown to be ineffective neither in raising aggregate demand nor stimulating inflation. Also, policy frameworks especially contractionary monetary policy as well as diversification and import reduction policies that can bring about stable inflation rate should be revitalised. It also imperative, that the supply of money by the monetary authority should be kept in the same pace with the growth of output in the economy. Also, fiscal policy should be revitalised in a way that can stimulate economic activities, thereby control inflation.

References


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