THE IMPACT OF FISCAL POLICY ON INFLATION IN NIGERIA

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Abstract

Inflation is a major problem in Nigeria. To stabilize the economy, policy makers have often used fiscal and monetary policies to address inflation. For efficacy of policy, it is important to know the likely influence of each of these on inflation in order to properly prescribe a solution. This work attempts to see the impact of fiscal policy on inflation. This is necessary because of the current demands of the Academic Staff Union of Universities (ASUU), which is likely to increase government spending and possible inflation. Using data from the Central Bank of Nigeria spanning 32 years, the study used an ordinary least squares regression analysis, and observed that fiscal policy impacts on inflation but such impact is not significant. Therefore, government may on the basis of this study, implement the agreement it had with the Academic Staff Union of Universities without the fear of inflation.

Keywords: Inflation, Fiscal Policy, Government Revenue, Government Spending

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1. Introduction

The Academic Staff Union of Universities (ASUU) in Nigeria is now on Industrial action. The Union has resolved not to return to work until government honours the pact it signed with the Union in 2009. This pact is majorly about better funding of public universities in the country, including the need to raise budgetary allocation to the education sub-sector, payment of earned allowances and general infrastructural development (Isa 2013). The Union seems embarrassed that four years into the agreement, not much has been done on the ground except rhetoric. However, another school of thought within the Union believes that government is probably working on advice from multilateral agencies, who may have advised the government to cut down public spending and fiscal deficits in order to improve macroeconomic performance (Isa 2013). Apart from this, inflation is a major challenge in Nigeria. There is fear that if government spends more as demanded by the Union, inflation is likely to rise to an unbearable level (Otto 2009, Isa 2013).

This study therefore seeks to identify the impact of fiscal policy on inflation in Nigeria. This is important to empirically identify appropriate policies to address inflation or to allay the fears of government. There is no doubt that theoretically, fiscal and monetary policies are instruments of stabilization. However, countries differ in their responses to such policies. It is therefore necessary to understand macroeconomic responses to such stabilization policies. More clearly, to what extent does fiscal policy impact on inflation in Nigeria?

2. Conceptual Issues

Fiscal policies define the use of taxation and public spending by government to achieve pre-set macroeconomic goals. It is about the use of government income and expenditure to direct the economy in the way governments deem fit. Such macroeconomic objectives include the attainment of: (i) full employment (ii) stable prices, (iii) a positive balance of payment (iv) economic growth (v) equitable distribution of income among others (Jhin Ghan, 2008). Some of these goals may conflict; for instance, a policy that will drive up employment is likely to create inflation, while a policy that will reduce inflation is likely to generate unemployment and lower the rate of economic growth (Phils, 1958). Studies (Rudiger, 1992) have also identified the problem of stagflation in many developing economies. This work simply attempts to examine the impact of fiscal policy on inflation in Nigeria.

Inflation defines a rise in the general level of prices of goods and services in an economy over a period of time (Otto, 2011) Inflation may also be defined as a sustained rise in general price levels or a period of persistent rise in prices (Otto, 2011). The implication is that each unit of the currency in question will buy less than it had previously bought. Inflation could bring about the debasement of the means of exchange.

Historically, infusions of gold or silver into an economy lead to inflation. Ball (1991) noted that when gold was used as currency, government could collect gold coins melt them down, mix them with other metals such as silver, copper etc., and reissue
them at the same nominal value. By diluting gold with other metals, government could issue more coins without needing to increase the amount of gold used to make them. When the cost of each coin is lowered in this way, government profits from an increased seigniorage (i.e. using the same quantity of gold to produce more money in coins). This practice increases the money supply but at the same time the relative value of each is lowered. As the relative value of the coin is lowered, consumers would need to give more coins in exchange for the same goods and services as before. These goods and services experience a price rise as the value of each coin is reduced (Otto, 2011). Inflation could be creeping, galloping or hyper. Increases in the quantity of money had occurred in different societies at different times in history.

**Theories of Inflation**

Several theories have been used to explain inflation worldwide, namely Demand – pull inflation; Cost – push inflation; Structural inflation and imported inflation. These theories will be discussed one after another below.

**The Demand Pull Theories of Inflation**

Demand-pull theories of inflation define inflation situations where aggregate demand for goods and services exceed aggregate supply, thereby leading to a general rise in price levels (Gbanador 2007). Usually the shortages create competition on the side of demand for the few available products leading to some kind of informal bidding for available items. The aggregate demand for these goods and services include the private demand for consumers’ goods, business firms and government including final output and inputs (Gbanador, 2007). The demand–pull inflation may also be called surplus demand inflation because it arises from too much money chasing few goods. More often it occurs where there is full employment so that the excess pressure on the factors of production leads to higher prices for the factors, ultimately leading to rise in the cost of production. It could also be a short run phenomenon where demand dynamics were not well anticipated. When there are production constraints, demand beyond the possible output level could also create inflation (Otto, 2011).

Demand- pull inflation may occur during cyclical booms during or immediately after war, this explains its high rates in Nigeria during 1969 to1970 Nigerian civil war. The rate of inflation during the war was very high (Otto, 2011). In the Biafran enclave, inflation was in three digits. These may not have been officially reported in their exact forms. In other words, inflation rates in Nigeria are generally believed to be under reported (Otto, 2011). The demand pull inflation may be explained using the old or new quantity theory of money or the Keynesian theory. The quantity theory of money attempts to explain the link between money and general price levels. The quantity theory (also referred as monetarists view) emphasize the influence of money supply as prime determinants of inflation (Jhinghan, 2008) while the Keynesians emphasize on non-monetary factors such as government expenditure, spending pattern and credits. The classical economist of the 17th Century connected the quantity theory of money to the general rise in prices. The crude quantity theory of money (of classical economy) state that the quantity of money at any given point in time is proportional to rise in prices (Jhinghan, 2008).

The monetarist school of thought led by Milton Friedman (1942) posits that inflation is ‘always and everywhere a monetary phenomenon and that it is everywhere since increases in the quantity of money always exceeds output’. Irving Fisher’s equation of exchange could be employed to explain the monetarist view. Fisher (1913) starts the analysis with a single identity that MV=PT. Fisher believes that in every transaction, there is a buyer and seller in the aggregate economy, the value of sales must be equal to the value of receipts. This identity can be mathematically modelled as follows:

\[ MV = PT \] (1)

\[ M = \text{Quantity of money (nominal) in circulation} \]
\[ V = \text{Transaction velocity of money in final expenditures} \]
\[ P = \text{General price level} \]
\[ T = \text{Volume of transactions} \]

Therefore in reviewing the monetarist view and the concept of circulation, Fisher defines price \( P \) as a function of money supply \( M \), volume of transactions \( T \) and velocity of circulation \( V \), i.e

\[ P = F (M, V, T) \] (2)

In equation (1), where \( MV = PT \), Fisher assumes \( V \) and \( T \) to be constant variables, so, \( M \) varies directly with \( P \).

\[ P = M \] (3)

However, Fisher’s equation failed to consider the impact of interest rates. It is also doubtful that \( M, V, P \) and \( T \) are fully independent as a change in any of them impacts on the others and can affect inflation.

This shortfall in Fishers’ equation, prompted Keynes (1940) to focus on the inflationary gap. Keynes explained that inflationary gap is a process where planned expenditure exceeds the equilibrium in the system; if there is a state of under-employment in the economy, an increase in the money supply will eventually lead to an increase in aggregate demand, output and employment (Onuchuku & Adoghor, 2000). However, as aggregate demand, output and employment rise further, and impacts on price. When
money supply increases beyond full employment, output ceases to rise. The excess money supply leads to an excess demand over supply and leads to an inflationary gap. This to Keynes is the true source of inflation. Keynes inflationary gap analysis is illustrated graphically in fig. 1 below.

![Figure 1. Illustration of Keynesians Theory of Demand Pull Inflation](source)

Fig. 1 shows the points where full employment (YEF1) equilibrate with the total output. It is being represented by a 45° line which cuts through point B. However, if there are further increases in aggregate demand, it will cause a shift in expenditure as shown at point E, and this will make the total expenditure to be at YE1 while the available output is BAYE (See Onuchuku Adoghor 2000). Nevertheless, Keynes has been criticized. The major thrust of critics is that the inflationary gap analysis is focused on the commodity market only and the analysis neglects the role of the factor markets. It is argued that inflation affects both commodity and factor markets because the excess demand caused by the commodity market would have an impact on the factor market. In point, Keynes analysis has two main drawbacks: (a) it lays emphasis on demand (b) it ignores the possibility that a rise in price may in turn lead to further increases in aggregate demand, which may in turn lead to further rise in prices (See Jhinghan 2008).

![Figure 2. The Demand Pull Theory of Inflation (Quantity Theory Version)](source)

Source: Gbanador (2007)
Fig. 2 shows that if the economy is in full employment, the Equilibrium price $P_1$ cuts the Demand curve $D_i$ at $A$. However, further demand as shown in $D_2$ will raise prices to $P_2$. It means that employment, and aggregate supply cannot be increased at the short run to offset the excess demand created by the shift. This is because output and supply are fixed at $0Y_1$.

Cost – Push Theories of Inflation:

Cost- push defines inflation arising from the supply side. It is often caused by the rising cost of production. This occurs when production costs increase and impact on the prices of the final products (Otto & Nenbee, 2011). The cost push inflation can also be called the ‘market power inflation’ because the increase in the prices of goods and services originates from the supply side of the economy. These increases may arise from increased wage rates or a fall in productivity, which also increases cost of labour output. It may also arise out of other factors of production or cost of inputs such as power supply, transport or raw materials (Otto & Nenbee 2011). In Nigeria, multiple taxation and corruption are major suspects (Otto 2011). These and other factors cumulatively influence the cost structure of products and determine the prices of the final output. Producers would react to rise in input prices by increasing prices of output including their profits margins, since these are usually set at fixed percentage of cost of production. However, an increase in the cost of production can force producers to cut down production (Otto 2011).

Cost- push inflation may also arise as a result of profit motives of producers in monopolistic and Oligopolistic industries (Otto 2011). Since there is a state of imperfection in such industries, their producers could administer their prices through price discrimination techniques.

![Figure 3. Diagram Depicting the cost – push Inflation](Source: Gbanador (2007))

Figure 3 Illustrates inflationary tendencies caused by supply- side factors. Point $M$ is referred to as the equilibrium point at full employment. At this point, price is $P_1$ and quantity of output is $Y_f$, but if the cost of inputs rise (such as increasing wages, rising cost of power supply through removal of fuel subsidy, amongst others), some suppliers with limited resources could cut production. This will lead to a fall in aggregate output of the particular industry as shown in $Y_N$. So, supply moves from $S_1yF$ to $S_2YN$. This reduction in total supply distorts the full equilibrium position and causes bidding among demand (from buyers) for the available goods, which ultimately shoot-up the price from $P_1$ to $P_2$ and a new equilibrium point at $X$. This explanation makes meaning in a market economy where the market is an allocator of economic resources. Another way to explain the cost-push (supply – side) inflation is to look at the behaviour of suppliers. As a result of increasing cost of production (often not peculiar to any producer), suppliers generally shift the burden of increased cost of production to the consumers by way of general price increases (Onuchuku Adoghor, 2000). If all suppliers do so, this is likely to lead to general rise in the prices of products. This is more common in imperfect markets.
In Nigeria, cost-push inflation is quite common. Every time government announces a new minimum wage, there is a rise in the prices of goods and services leading to inflation (Otto, 2011). This often nullifies the gains of the wage rise, leaving the Nigerian worker sometimes poorer than he or she was before the wage rise. However, Otto (2011) attributes this scenario to the announcement effect. Examples include the Udoji award of 1973 and the Shehu Shagari’s salaries and wages review of 1980 respectively (Otto, 2011). Between 1941 and now there has been about 15 of such wage reviews. These wage increases, often are not matched with increases in productivity and so lead to inflationary situations.

Table 1. Wage Reviews in Nigeria

| s/n | Wages Reviews                        | Year |
|-----|--------------------------------------|------|
| 1   | Bridges Committee                    | 1941 |
| 2   | Tudor Davis Commission               | 1945 |
| 3   | Harragim Commission                 | 1946 |
| 4   | Miller’s Commission                 | 1947 |
| 5   | Gorsuch Commission                   | 1955 |
| 6   | Mbanefo and Morgan’s Commission     | 1959 |
| 7   | Morgan’s Commission                  | 1963 |
| 8   | Adebo’s Commission                   | 1970 |
| 9   | Udoji’s Commission                   | 1973 |
| 10  | Shagari Award                        | 1980 |
| 11  | I.B.B. Wage Review                   | 1992 |
| 12  | Abdulsalam Wage Review               | 1999 |
| 13  | Obasanjo Wage Review                 | 2001 |
| 14  | Yar’Adua Minimum Wage Review         | 2008 |
| 15  | Jonathan Minimum Wage Review         | 2011 |

Source: Various sources

Philips (1958) examined the relationship between unemployment and inflation in Britain. He observed that there was an inverse relationship between unemployment and inflation. This is known as the Philip’s curve. He observed that when unemployment rate is high and the wage rates low, inflation will be low because of insufficient demand. This is a typical feature of an economy in recession because in such situation output shrinks. This was also the scenario in the world in the 1920s and 1930s before the Second World War (Keynes, 1940). On the other hand, a growing economy with increasing output was more likely to be inflationary. This is because the increase in economic activities will call forth various economic factors. The high demand for these factors of production drive up the cost of factors of production and the cumulative effect of the rise of input (factor) costs lead to increases in output prices. For the fact that these factors are supplied by households, these households are more economically empowered and this empowerment facilitates their ability to bear the cost of the rising output prices (Gbanador, 2007). The upshot of Philips’ finding was that a trade-off exists between inflation and unemployment is both mutually exclusive. If government opts for full employment, it must tolerate some level of inflation but if does not want inflation at all, it should minimize its growth and full employment objectives.

Since the era of Philips, the fact of stagflation has diminished the significance of Philips. In many developing economies, inflation and unemployment exist side by side. South American countries especially Brazil exemplified stagflation in the 1970s and 1960s (Rudiger, 1992).

Theories of Structural Inflation

Structural inflation defines inflation that is associated with the process of economic development. This is because the process creates disequilibria through the structural changes which are necessary for development (Luc, Lionel & Paternostra, 2003). Theorists (Friedman 1942; Friedman, 1957; Varshney & Maheshwari, 2014) believe that inflation is usually associated with economic growth especially in developing countries where institutional and structural constraints are real. Inflation also has a long-run tendency especially in the industrialized western countries owing mainly to differences in the rates of growth of productivity in the industrial and service sectors. According to Turvey (1951 cited in Jhinghan 2008) inflation arises from the process of competition to maintain total income, total real expenditure and total output. This view is reinforced by Schultz (1959).

Schultz (1959) observed from a study of inflation in United States of America 1955-1957, that
price increases were neither caused by demand pull nor cost-push factors but by sectorial shifts in demand. He postulated that since price do not fall in deficient sectors, the excess demand in other sectors will lead to a general price rise in a deficient sector and this will cause an inflationary trend in the economy.

**Imported Inflation**

This type of inflation is suffered by economies with high reliance on imported goods or services (Jhinghan, 2008). Such inflation could arise from the dumping of goods in the importing economy either as inputs or final output. The high prices of these imported goods are transmitted into the local economy which leads to an inflationary tendency (Jhinghan, 2008). A number of channels have been identified through which inflation is transmitted. One of the most efficient anti-inflationary policies in Nigeria would be to increase the domestic supply of goods and services to meet growing demand, if this was possible. However, the inelastic of demand for foreign goods is a major constraint that must be dealt with. For oil producing countries like Nigeria, inflation could be controlled if crude oil could be refined in the country in the short run and a restructuring of the economy into a more organized system in the long-run (Otto, 2014). An efficient management of the exchange rate can minimize imported inflation.

**Inflationary Trends and Effect in Nigeria**

Table 2 presents some macroeconomic variables in Nigeria including inflation.

| YEAR | MSO=NB | INT % | INF % | MSS=NB |
|------|--------|-------|-------|--------|
| 1980 | 3485.9 | 9.50  | 16.11 | 15100  |
| 1981 | 13847.9| 10.00 | 17.4  | 16161.7|
| 1982 | 15633.5| 11.75 | 6.90  | 18093.6|
| 1983 | 10797.4| 11.60 | 38.80 | 20879.1|
| 1984 | 9532.8 | 13.00 | 22.60 | 23370  |
| 1985 | 12032.4| 11.75 | 11.00 | 26277.6|
| 1986 | 11582.6| 12.00 | 13.70 | 27389.8|
| 1987 | 12041.6| 19.20 | 9.70  | 33667.4|
| 1988 | 13713.9| 17.60 | 51.20 | 45446.9|
| 1989 | 14011.5| 24.60 | 44.70 | 47055  |
| 1990 | 14702.4| 27.70 | 3.60  | 68662.5|
| 1991 | 16078.5| 20.80 | 23.00 | 87499.8|
| 1992 | 15357.2| 31.20 | 48.80 | 129085.5|
| 1993 | 14788.1| 36.09 | 61.30 | 198479.2|
| 1994 | 14991.4| 21.00 | 76.80 | 266944.9|
| 1995 | 13836.1| 20.79 | 51.60 | 318753.5|
| 1996 | 13953.4| 20.86 | 14.30 | 370333.5|
| 1997 | 14010  | 23.32 | 10.20 | 429731.3|
| 1998 | 13046.3| 21.34 | 11.90 | 525637.8|
| 1999 | 13494.6| 27.19 | 20.00 | 699733.7|
| 2000 | 13958.8| 21.55 | 14.50 | 1036079.5|
| 2001 | 14935.1| 21.34 | 16.50 | 1318569.1|
| 2002 | 16439.4| 30.19 | 12.10 | 1599494.6|
| 2003 | 17369.6| 22.88 | 23.80 | 1985191.8|
| 2004 | 19436.8| 20.82 | 10.00 | 2263587.9|
| 2005 | 21305.1| 19.49 | 11.60 | 2814846.1|
| 2006 | 23305.9| 18.70 | 8.60  | 4027901.7|
| 2007 | 25535.5| 18.36 | 6.60  | 5349253.3|
| 2008 | 27806.8| 18.70 | 15.10 | 8518489.2|
| 2009 | 30013.8| 22.90 | 12.10 | 10763778.7|
| 2010 | 32281.3| 22.51 | 13.80 | 1154782.8|

*Source: Central Bank of Nigeria Statistical Bulletin (See Cenbank.org)*

**Key:** MSS = Money Supply; MSO = Manufacturing Sector Output; INT = Interest Rate; IFL = Inflation Rate
Figure 4. Inflation and Interest Rates in Nigeria 1980-2010
Source: Constructed from Table 2

Inflation poses serious challenges especially in developing countries (Dornbusch, 1992) such as Nigeria. Inflation increases the cost of goods, deepens poverty and makes life difficult for the poor. Inflation in Nigeria keeps soaring in spite of unemployment. Figure 4 shows the relative movement of inflation and interest rates in Nigeria between 1980 and 2010. The specific effects of inflation in Nigeria include:

**Planning Problems**

Inflation in Nigeria impacts on planning and financial projections. Inflation makes it difficult to estimate the cost of living or cost of production based on current prices, because sooner or later inflation creates cost overrun which distorts these plans (Tamuno & Otto, 2006). The instability does not encourage foreign investors into the economy.

**Project Execution**

Government Projects are often abandoned on account of inflationary pressures in Nigeria. Projects planned on the basis of current prices may soon run into difficulties because inflation may have doubled the assumed prices (Tamuno & Otto, 2006). These costs overrun make it difficult for contractors or project executors to continue such projects. This is a major source of uncompleted projects in Nigeria.

**Discourage Savings**

An inflationary economy discourages savings, because the real value of the saved sum is eroded by inflation. Thus, it is not efficient to save monies during inflation. However, savings are critical for investments (Friedman, 1957). Apart from investments the need to address emergent difficulties are ever present with us. And in an economy where accesses to funds are difficult, this is a real challenge.

**Inequality**

Inflation heightens social inequality. Quite often those with head starts tend to benefit more from inflation. Producers take advantage of inflation to increase their profits, while workers become casualties. This causes frustration among workers and drive instincts for sharp practices or other survival strategies on the worker (Otto, 2014). At the same time the over empowered wealthy Nigerians occasioned by inflation uses this access to wealth in a manner that will encourage capital flight from the economy (Todaro & Smith, 2009).

**Pensioners and Fixed Income Earners**

Fixed income and pension income earners have suffered greatly from inflation in Nigeria. Inflation has eroded their spending abilities greatly. Recently, the Kano state Government came to the rescue of pensioners by increasing the nominal earnings from about N200 monthly to N6, 000.00 for the minimum pensioner in order to shore up with inflation (Otto, 2014). N200.00 was a lot of money many years ago, but that amount may not buy a loaf of bread in Nigeria today nor is it enough to serve as transport fare to where the payment could be made. The fall in real incomes impacts negatively on the welfare of fixed income earners.
3. Research Methodology and Data Analysis

This study relies on secondary time series data obtained from the Central Bank of Nigeria for its analysis. The data is for a period of 32 years (1980 – 2011). This span of time is sufficient to identify a trend. Using E-view an OLS regression was done. However, historical data is often affected by serial correlation which could render such results spurious (Koutsoyiannis, 1977). To overcome this, the study used econometric tools to test for unit root and co-integration. The research data include Government Revenue, Gross Domestic Product, Government Expenditure and Inflation.

Model Formulation

The model for the work was specified as:

\[
\text{INFL} = (\text{GDP}, \text{GREV}, \text{GEXP})
\]

\[
\ln \text{INFL} = \beta_0 + \beta_1 \ln \text{GDP} + \beta_2 \ln \text{GREV} + \beta_3 \ln \text{GEXP} + U
\]

For the fact that some of these are in whole numbers and others in fractions the linear model was converted into log as follows:

\[
\ln \text{INFL} = \beta_0 + \ln \beta_1 \ln \text{GDP} + \ln \beta_2 \ln \text{GREV} + \ln \beta_3 \ln \text{GEXP} + U
\]

Table 4. Result of Short Run Analysis

| Variable | Coefficient | Std. Error | T-Statistic | Prob  |
|----------|-------------|------------|-------------|-------|
| C        | 17.27102    | 13.74759   | 1.256294    | 0.2194|
| GREV     | -1.45E-05   | 2.21E-05   | -0.668191   | 0.5158|
| GEXP     | 1.65E-06    | 1.69E-05   | -0.097867   | 0.9227|
| GDP      | 3.84E-05    | 5.81E-05   | 0.060312    | 0.5144|
| R-Squared| 0.119827    | Mean dep var| 21.42156   |       |
| adjusted R-Squared| 0.025523 | S.D dep var| 18.95562   |       |
| S.E of regression | 18.71216 | Akaike info criterion | 8.812692 |       |
| Sum Squared resid | 9804.054 | Schwarz criterion | 8.995909 |       |
| Log likelihood | -137.0031 | Hannan – Quinn criterion | 8.734242 |       |
| F-Statistic | 1.270642 | Durbin – Watson Stat | 1.106345 |       |

Table 4b. Log- Linear Regression Result

| Variable  | Coefficient | Std. Error | T-Statistic | Prob  |
|-----------|-------------|------------|-------------|-------|
| C         | 2.281433    | 4.280998   | 0.532921    | 0.5983|
| LOG(GREV) | 0.053224    | 0.893595   | 0.059562    | 0.9287|
| LOG(GEXP) | -0.147275   | 0.988868   | -0.148933   | 0.8827|
| LOG(GDP)  | 0.129029    | 0.455710   | 0.283139    | 0.7792|
| R-Squared | 0.028476    | Mean dep var| 2.740899   |       |
| adjusted R-Squared | -0.075616 | S.D dep var | 0.791788 |       |
| S.E of regression | 0.821178 | Akaike info criterion | 2.560316 |       |
| Sum Squared resid | 18.88134 | Schwarz criterion | 2.743533 |       |
| Log likelihood | -36.96505 | F-statistic | 0.273562 |       |
| Durbin – Watson Stat | 1.129605 | Prob (F-statistic) | 0.843937 |       |

Source: Author’s Computation and Extracts from E-view Printout
4. The Results

The results show that fiscal policy can only account for 28% of inflation in Nigeria. In other words, inflation is affected by other factors such as monetary policy, corruption, scarcity, multiple taxations amongst other factors.

Table 5. Augmented Dickey Fuller (ADF) Unit Root Test

| Variables | ADF statistic | Critical values | Remarks |
|-----------|--------------|-----------------|---------|
|           |              | 1%              | 5%      | 10%     |         |
| Inf       | -5.603232    | -3.677322       | -2.967767 | -2.622989 | I(1)    |
| GREV      | -6.465170    | -3.670170       | -2.963772 | -2.621007 | I(1)    |
| GEXP      | 5.720744     | -3.670170       | -2.963970 | -2.621007 | I(0)    |
| GDP       |              |                 |         |         |         |

Source: E-views 7 computation

Jarque-Bera (JB) statistic of 5.901877 with probability of 0.052291, which is statistically insignificant at 5%, indicates that the residuals are normally distributed. Further verification of the existence of constant variance using Breusch-Pagan-Godfrey procedure reveals an insignificant F-statistic of 0.193908 (ρ = 0.8997). This is an evidence that the error variance are equally spread. The cumulative sum (CUSUM) test was employed to ascertain parameter stability. From the test, the line is between the critical bounds. This indicates that the model is stable.

Table 6. Test for Cointegration

| Trace Statistic | 0.05 Critical Value | Prob. Value |
|-----------------|---------------------|-------------|
| 77.67473        | 47.85613             | 0.0000      |
| 39.82339        | 29.79707             | 0.0025      |
| 19.62164        | 15.49471             | 0.0113      |
| 6.671274        | 3.841466             | 0.0078      |

Source: Computed from field study: E-view Results

The test for co-integration follows the Johansen procedure, from the above table, the trace statistic obtained are more than the 5% critical values, thus, the variables tend to have a long-run relationship.

Table 7. Granger Causality Test

| Null Hypotheses       | F-statistic | ρ-values |
|-----------------------|-------------|----------|
| GGEXP does not Granger cause INF | 3.84773     | 0.0349   |
| INF does not Granger cause GGREV  | 4.58719     | 0.0201   |

Source: E-view

Granger causality test conducted reveals that the direction of relationship flows from GEXP to INF, and then, from inflation to GREV. Implicitly, this means that changes in GEXP precedes changes in the level of inflation. Also, changes in inflation, precedes changes in GGREV. This further suggests that, to a meaningful extent, inflationary pressure tends to exhibit strong influence on government capacity to accumulate revenue. Similarly, the level of government spending tends to spur general prices of commodities. This brings to mind the existence of demand-pull inflation which is attributed to persistent increase in public spending in Nigeria. Further test that is based on the application of error correction mechanism reveals that the ECM coefficient is significant and appears with the correct sign, which suggests that the variables tend to adjust meaningfully to short-run disequilibrium.

Conclusion and Recommendation

From the study, there is evidence to show that fiscal policy impacts on inflation but the level of impact is not significant in Nigeria. Inflation in Nigeria is affected more by scarcity of goods, corruption, multiple taxation, high cost of borrowing and infrastructural deficits. There is a need for infrastructural development in order to encourage the private sector to produce more. Government should increase its capital spending to provide roads, basic education, health, pilot industries and encourage the private sector to take over industries that can better be
privately run. If properly done, this symbiosis will create room for economic development and growth, which will lead to high employment level. The high level of employment calls for policies that will encourage private sector participation in the economy. In addition, there is need to create structures that will ensure that entrepreneurs equitably distribute gains from their investments with their workers. Government may on the basis of this study, implement the agreement it had with the Academic Staff Union of Universities without the fear of inflation. As shown by Otto (2009), there is every need to encourage an intensification of domestic output and discourage imports of goods that have local substitution this is better done when human capital is available locally to drive the process.

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