INFLATION AND UNEMPLOYMENT NEXUS IN NIGERIA: ANOTHER TEST OF THE PHILLIP’S CURVE

Anthony Orji1 † --- Onyinye I. Anthony-Orji2 --- Joan C. Okafor3

1Department of Economics, University of Nigeria, Nsukka, Nigeria
2C/o Department of Economics, University of Nigeria, Nsukka, Nigeria
3Department of Business Administration and Management, Abia State Polytechnic Aba, Nigeria

ABSTRACT

This research work examines the inflation and unemployment nexus in Nigeria by testing if the original Phillips curve proposition holds for Nigeria. The study adopted a distributed lag model with data covering the period 1970-2011. The consumer’s price index (a measure of inflation rate), was regressed on unemployment rate, growth rate of money supply, budget deficit, real gross domestic product, interest rate and the lag of current interest rate. The result reveals that unemployment is a significant determinant of inflation and that there is a positive relationship between inflation and unemployment rate in Nigeria. This finding invalidates the original proposition on the Phillips curve hypothesis in Nigeria. The study therefore recommends that the economy should be diversified and appropriate policies should be put in place by Government and the monetary authorities in order to curb the menace of inflation and unemployment and consequently reduce the problem of stagflation in Nigeria. Again, there is a need for strong institutional collaboration in dealing with these two macroeconomic variables; unemployment and inflation as have been recommended in the paper.

Keywords: Inflation, Unemployment, Hypothesis, Determinants, Philips curve, Nigeria.


Contribution/ Originality

This study contributes to the existing literature by using a distributed lag model to Inflation and Unemployment Nexus in Nigeria. The result reveals that there is a positive relationship.
between inflation and unemployment rate in Nigeria. This finding invalidates the original proposition on the Phillips curve hypothesis in Nigeria.

1. INTRODUCTION

Inflation and unemployment remain burning issues in any economy. All policymakers would to a large extent, wish to have low rates of inflation and unemployment. It is often argued that a single-digit rate of inflation and an unemployment rate of about five per cent would ensure macroeconomic stability in an economy all things being equal. Macroeconomic stability is essential for growth, planning and development, hence the desirability of examining the movement of other economic fundamentals if the goal of stability will be achieved.

Inflation, which connotes the general increase in the price level, is broadly an average measure because at any point in time, prices may be increasing, decreasing or constant; a persistent increase in prices hurts the economy, particularly the poor who have little or no savings to cushion rising prices. The average person in any household or family knows when the money in his possession can only purchase less quantity of goods and services than was previously possible. Generally, economic agents (households, private sector and government) would raise an alarm because their earnings have declined in real terms due to rising prices. It is even worse when uncertainty follows price increases. (Nwaobi, 2009)

In recent times however, the concern is no longer with single-digit rates of inflation (less than 10 per cent) but with the benchmark desirable for any economy. Recent research results show that the inflationary threshold for Nigeria is between 14 to 18 per cent, so why the frenzy over a single-digit rate of inflation? It is interesting to note that even very low rates of inflation (disinflation) can be harmful to an economy but the question is which rate is very low?

Another interesting variable is how inflation is measured? What are the types of goods and services that enter the basket? Which method is used in computing the rate of inflation? The extent of the survey is crucial and so are several other issues.

In Nigeria, the mandate of the Central Bank is to ensure price stability while the National Bureau of Statistics computes and publishes the rates of inflation for all items in the economy – food, manufacturing, transport, etc. Economists in Nigeria have shown through research that inflation in the country is caused by several factors such as increased public spending, money supply, intermittent scarcity, announcement effect, removal of petroleum subsidy, etc. Looking at the Nigerian data, the rate of inflation which stood at 21.4 per cent in 1980 plummeted to 7.2 per cent a year after but by 1983, it had jumped to almost 41 per cent. During the Structural Adjustment Program era (1986 -1992), the rate of inflation averaged 31.5 per cent. From 1995 to 2007, it averaged 12.3 per cent (a period characterized by a democratic experiment and the bold effort at a better management of the economy). During the period 2008 to 2011, the rate of inflation stood at 12 per cent. The inflationary trend shows that it has been non-linear overtime.

Another disturbing but significant macroeconomic variable is the rate of unemployment. A high rate of unemployment connotes output loss to the economy. The rate of unemployment
captures the percentage of those willing and able to work but cannot find employment, it captures the frequency duration and incidence of unemployment. In Nigeria, early statistics on unemployment should not be taken seriously because the data indicated that the economy was at full-employment output. However, from 1999 the rates of unemployment started making some sense, it was 13.5 per cent in 1999 and at the end of President Olusegun Obasanjo’s administration in 2007 the rate of unemployment had reduced marginally to 12.7 per cent, and from 1999 to 2007 the rate of unemployment was 13.1 per cent (still quite high) since five per cent is perceived as the accepted rate. In 2008 the rate of unemployment was almost 15 per cent but rose drastically to about 24 per cent in 2011. The unemployment rate has been rising from 1980 to 2011, a recent forecast shows that the rate would continue to increase up to the year 2020.

Rising rates of unemployment and inflation paint a picture of unsatisfactory macroeconomic performance of the economy, a situation known as stagflation. Some economists have argued that it is not possible to have low rates of inflation and unemployment as policy outcomes, consequently policymakers ought to decide what rate of inflation should be sacrificed for an acceptable rate of unemployment. (Ekpo, 2012).

The question becomes: Is there a trade-off between inflation and unemployment? If such a trade-off exists, then it follows that policy options are necessary to determine the precise tradeoff between inflation and unemployment necessary for the Nigerian economy. It is thus crucial that our policymakers determine the appropriate (acceptable) rates of inflation and unemployment for the economy. Recent data suggest that inflation is trending downwards while unemployment is rising. There is no doubt that the Central Bank via its monetary policy mechanism, tries to ensure price stability, but it appears that the strategies and policies employed in the labour market are not achieving the desired outcomes. Interestingly, Nigerians may not be interested whether there is a trade-off between inflation and unemployment, but the availability of jobs and low inflation rates.

Since the early eighties, unemployment has assumed an alarming dimension and a crisis proportion with millions of able bodied persons who are to accept jobs at the prevailing wage rate but are unable to find placements. Thus unemployment has been regarded as one of the most challenging economic problems facing the Nigerian Policy maker. (Fatukasi, 2011).

The history of inflation has a lot to tell, given an instance of the middle 1970’s when there was oil boom in the economy, there was high inflation rate yet frantic efforts to reduce the rate of inflation were not made. Rather the government imposed inflationary policies such as the Udoji’s awards that unnecessarily left money in the pockets of civil servants. Also the introduction the structural adjustment program (SAP) by Babangida, despite its much popularized potential benefits left the macroeconomic environment highly destabilizing, these were the scenarios that led Nigeria to the high rates of inflation it’s facing till date.

According to the Central Bank of Nigeria (2003) the national unemployment rate, rose from 4.3 percent in 1970 to 6.4 percent in 1980. The high rate of unemployment observed in 1980 was attributed largely to depression in the Nigerian economy during the late 1970s. Specifically, the economic downturn led to the implementation of stabilization measures which included restriction
on exports, this caused import dependency of most Nigerian manufacturing enterprises that in turn resulted in operation of many companies below their installed capacity. This development led to the close down of many industries, while the survived few were forced to retrench a large proportion of their workforce. Owing to this, the national unemployment rate fluctuated around 6.0% until 1987 when it rose to 7.1%, it is important to state here that the structural adjustment programmed (SAP) adopted in 1986, had serious implications on employment in Nigeria, as unemployment rate declined from 7.1% in 1987 to as low as 1.8% in 1995, after which it rose to 3.4% in 1996, and hovered between 3.4 and 4.7% between 1996 and 2000. Recent surveys are confronted with the statistic that 40 million Nigerians are unemployed. It is indeed worrisome for a country with a population figure of about 170 million to have 40 million unemployed. (Ekpo, 2012)

Against this background therefore, this study intends to do a critical study of the relationship that exist between inflation and unemployment in Nigeria. Specifically this study intends (1) to find the relationship between inflation and unemployment rate in Nigeria. (2) to examine if the original Philips curve proposition holds in Nigeria.

2. LITERATURE REVIEW

2.1. Theoretical Literature

2.1.1. The Phillips Curve

In 1958 British economist A.W. Phillips published the results of an empirical analysis of historical data from the U.K. labour market. Phillips’s study was intended to help answer one of the basic questions in macroeconomic theory, which concerns the cause of inflation. He hoped to find empirical support for the Keynesian view that the rate of wage inflation that is, the rate of increase in nominal (money) wage rates depended on the tightness of the labour market. Since the level of unemployment was a readily observable indicator of the tightness of the labour market, Phillips’s immediate goal was “to see whether statistical evidence supports the hypothesis that the rate of change of money wage rates in the United Kingdom can be explained by the level of unemployment and the rate of change of unemployment. The logic behind Phillips’s theory is very simple, if for some reason the demand for labour were high relative to its supply then equilibrium wage rates would be expected to rise above current wage levels, and there would be upward pressure on nominal wages as firms bid for additional workers. As additional workers were actually hired, the unemployment rate would fall. The larger the discrepancy between the quantity of labour demanded and the quantity supplied, the stronger the upward or downward pressure on wage rates. The opposite would be true when there was excess supply of labour and rising unemployment. Phillips found, as he expected that from 1861 to 1957, the growth rate of nominal wages was negatively correlated with the rate of unemployment that is low unemployment rates tended to be associated with rapidly rising wages while high unemployment rates were associated with slowly rising wages. Phillips also found that the strength of the unemployment versus wage-change relationship seemed to depend on the level of unemployment. When unemployment was low, decreases in unemployment tended to be associated with big increases in wage inflation while when
unemployment was high, decreases in the unemployment rate seemed to produce small increases in wage growth rates.

Figure 1. Below shows a hypothetical Phillips curve.

2.2. The Modified Phillips Curve

The Philips curve enjoyed some success as it became a popular element of macroeconomic theories soon after and had great influence on the government policy of the 1960s. Because it was regarded as an instrument for economic policy, the government thought they could achieve low unemployment as long as they were willing to tolerate higher inflation and attain price stability through tolerating a higher Unemployment. (Blanchard and Illing, 2009).

However, during the 1970s the inverse relation between inflation and unemployment however broke apart and the most of the OECD member states observed stagflation which means high inflation as well as high unemployment. But although the Phillips curve could not explain stagflation, a new relation between unemployment and inflation was discovered, namely the inverse relation of unemployment and changes in inflation. This relationship was the foundation for the modified Phillips curve and is still valid and applicable for many developed countries. It has evolved under the pressure of events and the progress of economic theorizing, incorporating at each stage such new elements as the natural rate hypothesis or the NAIRU (non-accelerating inflation rate of unemployment), the adaptive expectations mechanism, and most recently, the rational expectations hypothesis.

2.3. Empirical Literature

Several studies in the literature have investigated theoretical and empirical relationships between inflation and unemployment but what we have learnt from the literature is that the argument is still ongoing. This is as a result of the several conflicting and contrasting results.
obtained by some of these studies. One of the issues which have captured most of the debate is whether the propositions of A.W. Phillips holds true in reality or not. Thus, this current study is relevant to enable us identify the true empirical situation in Nigeria, with respect to the Philip’s curve and also make necessary policy recommendations.

DiNardo and Moore (1999) using the quarterly data of the nine OECD countries extended the Philips curve to an open market economy and exploit panel data to estimate the “expectations augmented” Philips curve with a market-based and observable measure of inflation expectations. OLS and generalized least squares showed that although changing expectation played a role in creating the empirical failure in the 1970’s, supply shocks were at least as important.

In a study of some African countries, Carlos (2010) examined if the Phillips curve is a relevant tool to conduct monetary policy in African countries wishing to adopt an inflation targeting regime. Using Nigeria as a case study, he estimated the model by using Bayesian econometric technique. The study concluded that there was evidence that central banks could control the inflation rate through a Phillips curve, the sterilization of the resources from oil exports and a Taylor rule that includes the exchange rate.

Erbaykal and Okuyan (2008) examined the relationship between the inflation and the economic growth in Turkey from 1987-2006. The existence of a co integration relationship between the two series was detected following the test results. Whereas no statistically significant long term relationship was found using the ARDL models, a negative and statistically significant short term relationship was found. The causality relationship between the two series was examined in the framework of the causality test developed by Toda and Yamamoto (1995). Whereas no causality relationship was found from economic growth to inflation, a causality relationship was found from inflation to economic growth.

Saaed (2007) explored the relationship between inflation and economic growth in the context of Kuwait, using the annual data set on real GDP and CPI for the period of 1985 to 2005. The estimated result of the relationship shows a long-run and strong inverse relationship between CPI and GDP in Kuwait.

Onwioduokit (2006) investigated the relationship between unemployment and inflation in Nigeria and found that there is negative relationship between unemployment and inflation with the coefficient of -0.412, this validates the Philips hypothesis. However, the results of the causality test indicate no causality between unemployment and inflation in Nigeria.

Ola-David and Oluwatobi (2012) investigated the existence of an Okun-type relationship for the Nigerian economy during the period 1970 to 2009. The results showed that a long run inverse relationship exists between unemployment and output in Nigeria. The Okun coefficient was 1.75 percent indicating that a one percent decrease in unemployment rate is accompanied by a 1.75 percent increase in GDP.
3. METHODOLOGY

3.1 Model Specification

This study will adopt and modify the model specifications of Nwaobi (2009) to establish the existence of the Phillips curve in Nigeria. But we differ by incorporating the use of lagged interest rates and a distributed-lag model. Thus to study any relationship between variables, it is essential to express it in various forms.

Hence the models are specified as follows;

MODEL 1

Functional Form:
CPI = f (UNEMP, GRM2, BD, INTR, INTR (-1), RGDP) .................................................(1)

The Mathematical Form:
CPI = \beta_1 + \beta_2 \text{UNEMP}_t + \beta_3 \text{GRM2}_t + \beta_4 \text{BD}_t + \beta_5 \text{RGDP}_t + \beta_6 \text{INTR}_t + \beta_7 \text{INTR}_{t-1} + \mu_t .................. (2)

The Econometric Form of the model is specified below:
CPI = \beta_1 + \beta_2 \text{UNEMP}_t + \beta_3 \text{GRM2}_t + \beta_4 \text{BD}_t + \beta_5 \text{RGDP}_t + \beta_6 \text{INTR}_t + \beta_7 \text{INTR}_{t-1} + \mu_t ...... (3)

Where;
CPI = Inflation rate proxied by Consumers price index
UNEMP = Unemployment rate
GRM2 = Growth rate of money supply
BD = Budget deficit
RGDP = Real gross domestic product
INTR = Interest rate
INTR (-1) = Lagged (one period interval) interest rate
\beta_1 \beta_2 \beta_3 \beta_4 \beta_5 \beta_6 \beta_7 are the slope coefficients or parameters.
\beta_0 = \text{Intercept term for model I}
\mu_t = \text{Stochastic error term}.

3.2. Nature and Sources of Data

The annual time series data are gotten from secondary sources such as CBN Bulletin, NBS Bulletin, World Bank data bank, covering the period of 42 years that is, 1970 – 2011.

3.3. Estimation Procedure

Ordinary least squares (OLS) method is best suited for this kind of analysis since single equation model is used, under the assumption that there is no simultaneity that is, the independent variables are uncorrelated with the error term. Symbolically, Cov (U, CPI, UNEMP, GRM2, BD, RGDP, INTR, INTR_{t-1}) = 0. Eviews 6 was used for this estimation.
4. PRESENTATION OF RESULTS AND ANALYSIS OF FINDINGS

4.1. Unit Root Test Results

Since we are dealing with time series variables which are generated through a stochastic process, we are first going to determine first if this stochastic process is stationary. For this purpose, the Augmented Dickey-Fuller test is used. A variable is stationary if the absolute ADF value (|τ|) is greater than any of the absolute tau critical values. The Augmented Dickey Fuller (ADF) test was applied to find the existence of unit root in each of the time series.

Hypothesis testing:

H₀: δ=0
H₁: δ<0

Decision Rule: reject the null hypothesis if |τcal|>|τtab|, do not reject if otherwise. The results of the ADF test at levels and first difference can be found in appendix A1 while the summary is reported in Table 4.1

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF Test Statistics</th>
<th>5% ADF Critical Value</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI</td>
<td>-6.465731</td>
<td>-2.938987</td>
<td>I(2)</td>
</tr>
<tr>
<td>UNEMP</td>
<td>-8.827925</td>
<td>-2.936942</td>
<td>I(1)</td>
</tr>
<tr>
<td>BD</td>
<td>-6.890310</td>
<td>-2.936942</td>
<td>I(1)</td>
</tr>
<tr>
<td>GRM2</td>
<td>-4.363747</td>
<td>-2.935001</td>
<td>I(0)</td>
</tr>
<tr>
<td>RGDP</td>
<td>-5.203764</td>
<td>-2.936942</td>
<td>I(1)</td>
</tr>
<tr>
<td>INTR</td>
<td>-9.9993499</td>
<td>-2.936942</td>
<td>I(1)</td>
</tr>
<tr>
<td>INTR₄₋₁</td>
<td>-9.954404</td>
<td>-2.936942</td>
<td>I(1)</td>
</tr>
</tbody>
</table>

The ADF test for unit root shows that GRM2 was stationary at level form, UNEMP, BD, RGDP, INTR and INTR₄₋₁ were stationary at first difference while CPI and was stationary at second difference, on this basis, the null hypothesis of non-stationarity is rejected, and we conclude that the variables are stationary at levels, first difference and second difference respectively.

4.2. Cointegration Test Results

A cointegration test was carried out to ascertain if there is a long run relationship between the dependent variable (CPI) and the independent variables (UNEMP, BD, GRM2, RGDP, INTR, INTR₄₋₁). In order to test for this, Augmented Engle-Granger test is used, which requires applying ADF to the residuals of the regression.

Hypothesis Testing:

H₀: δ=0 (there is no cointegration)
H₁: δ<0 (the variables are cointegrated)

Decision Rule:Reject Ho if |τcal|>|τtab|, do not reject if otherwise.
From table 4.2 above, since $|\tau_{cal}| > |\tau_{tab}|$ at 5% critical value, we reject the null hypothesis that it is non-stationary and conclude that it is integrated of order zero $I(0)$ and also conclude that the variables used in this model maybe cointegrated (that is they have a longrun equilibrium relationship between the regressors and the regressand).

### 4.3. Error Correction Modeling Of CPI

The error correction mechanism (ECM) first used by Sargan and popularized by Engle and Granger corrects for disequilibrium. It is a means of reconciling the short-run behaviour of an economic variable, with its long run behavior. The sign of its coefficient is expected to be negative, so as to restore equilibrium to the dependent variable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>T-Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>2.811955</td>
<td>2.546152</td>
</tr>
<tr>
<td>D(UNEMP)</td>
<td>0.193780</td>
<td>0.584508</td>
</tr>
<tr>
<td>D(GRM2)</td>
<td>-0.010707</td>
<td>-0.235338</td>
</tr>
<tr>
<td>D(BD)</td>
<td>-0.00000427</td>
<td>-1.095458</td>
</tr>
<tr>
<td>D(RGDP)</td>
<td>0.0000820</td>
<td>2.484716</td>
</tr>
<tr>
<td>D(INTR)</td>
<td>-0.344027</td>
<td>-1.386828</td>
</tr>
<tr>
<td>D(INTRt-1)</td>
<td>-0.25843</td>
<td>-1.010170</td>
</tr>
<tr>
<td>ECM(-1)</td>
<td>-0.134054</td>
<td>-1.045933</td>
</tr>
</tbody>
</table>

The result above suggests that the inherent error in the model is corrected by 13%. In other words, the speed of adjustment for the variables to return to their equilibrium state when there is a short – run distortion is 13%. However, this value is statistically insignificant.

### 4.4. Presentation and Interpretation of the OLS Estimates

The result of the model presented in section three is presented in the tables below:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>Standard Error</th>
<th>T-Statistics</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-41.06047</td>
<td>12.36813</td>
<td>-3.319861</td>
<td>0.0022</td>
</tr>
<tr>
<td>UNEMP</td>
<td>2.417013</td>
<td>0.585161</td>
<td>4.130511</td>
<td>0.0002</td>
</tr>
<tr>
<td>GRM2</td>
<td>-0.037261</td>
<td>0.125157</td>
<td>-0.297716</td>
<td>0.7677</td>
</tr>
<tr>
<td>BD</td>
<td>-0.0000190</td>
<td>0.0000102</td>
<td>-1.874833</td>
<td>0.0694</td>
</tr>
<tr>
<td>RGD0</td>
<td>0.000225</td>
<td>0.0000128</td>
<td>17.60604</td>
<td>0.0000</td>
</tr>
<tr>
<td>INTR</td>
<td>-0.648594</td>
<td>0.289186</td>
<td>-2.242827</td>
<td>0.0315</td>
</tr>
<tr>
<td>INTRt-1</td>
<td>-0.253496</td>
<td>0.324147</td>
<td>-0.782041</td>
<td>0.4396</td>
</tr>
</tbody>
</table>
From the regression result obtained, the model output is thus specified as follows:

\[
\text{CPI} = -41.061 + 2.417 \text{UNEMP} - 0.037 \text{GRM2} + 0.000002 \text{BD} + 0.000225 \text{RGDP} - 0.649 \text{INTER} - 0.253496 \text{INTER}_{t-1} + \mu_i
\]

From table 4.4 above, we observed that the coefficient of unemployment rate is 2.417 and its \( \tau \)-statistics is 4.130511. This does not conform to apriori expectation. This implies that a unit increase in the rate of unemployment on the average leads to a 2.417 percent increase in Inflation rate. This sign is not consistent with the postulation of the Phillips curve hypothesis of the negative (inverse) relationship that exists between inflation (wage rate) and unemployment rate. The increasing unemployment rate is not baffling, owning to the current unemployment issues experienced in Nigeria today. Consequently, the failure of these variables to conform to a priori expectation shows evidence of stagflation in the Nigerian economy, an indication that the Phillips curve relation does not exist in Nigeria.

The coefficient of -0.0000190 reveals that a unit increase in budget deficit, reduces the rate of inflation by about 0.00190 percent, although this is statistically insignificant. The negative relationship is not in line with the Neoclassical school of thought which argues that “the most direct connection between government deficits and inflation is that by increasing the real value of outstanding bonds and perceived net wealth, a deficit can raise total spending and the price level because the economy is operating at full employment” (Dwyer, 1982). This finding is similar to that of Fatukasi (2011), in the determinants of inflation rate in Nigeria.

From the results, the growth rate of money supply negatively and insignificantly impacts on inflation rate with a coefficient of -0.037261. This suggests that a unit increase in the growth rate of money supply, decreases the rate of inflation by 0.037261 percent. The reason for this may be as a result of the fact that inflation can no longer be seen as a monetary phenomenon in Nigeria, but other institutional factors that could possible affect inflation. Although its impact is seen to be negligible. The coefficient of interest rate is negative and it does not conform to apriori sign. The result shows that a one percent increase in the current year’s interest rate, significantly decreases the rate of inflation by 0.65%. The coefficient of the lagged interest rate (\( \text{INTER}_{t-1} \)) shows that a unit increase in last year’s rate of interest, will lead to a 0.253496 percent decrease in the rate of inflation within the period.

### 4.4.1. Coefficient of Determination

The value of the \( R^2 \) from our regression result is 0.969963 while the adjusted is 0.964662. It entails that 97% of the variations in the dependent variable is accounted for by the independent variables.
5. SUMMARY OF MAJOR FINDINGS

In this study, we set out to empirically determine the existence of the Phillips curve hypothesis in Nigeria between 1970 and 2011. Secondary data collection was used and the sources of data included Central Bank of Nigeria (2011), National Bureau of Statistics (NBS). In order to achieve the objectives of the study, econometric models were estimated using the Ordinary Least Square (OLS). In the model, Consumer’s price index which was used as a proxy for inflation rate was regressed against unemployment rate, growth rate of money supply, budget deficit, real gross domestic product, interest rate and lagged interest rate.

The major findings of the study are summarized below:

1. There exists a positive and significant relationship between inflation rate and unemployment. The implication of this result is that there is evidence of stagflation in Nigeria.

2. The result has also revealed that budget deficit is an insignificant factor affecting inflation in Nigeria. The implication is although the neoclassical school of thought are of the notion that the more an economy borrows, the higher the rate of inflation, this can only be possible if the economy is at its full employment of resources.

3. The result also shows that growth rate of money supply is an insignificant determinant of inflation in Nigeria, and that the relationship that exist between them is negative, this finding goes against the quantity theory of money, which established a positive relationship between price levels and money supply.

4. Also the real gross domestic product is a very significant determinant of inflation in Nigeria. The value of goods and services is an essential determinant of inflation in Nigeria.

5. The result also showed that the present year’s rate of interest was a significant determinant of inflation.

6. The value of last year’s interest rate had no significant impact on this year’s inflation rate.

6. POLICY RECOMMENDATIONS

Based on the findings of this study, the following policy recommendations are suggested:

1. The empirical results of this study have revealed a positive relationship between inflation and unemployment in Nigeria. Effectively, rising unemployment has resulted in increasing inflation within the period under review. In particular, our analyses have shown that there is stagflation in the Nigeria economy. This invalidates the Phillips curve thesis in Nigeria. Thus, effective policies to control inflation and unemployment should be adopted by the government. The first area government should focus on is to create jobs and employ the abundant human and natural resources we have in the production process. Possible factors responsible for the stagflation (high inflation and high unemployment rate) in Nigeria include, the overdependence on the oil sector, the existence of unused labour surplus in Nigerian economy which has resulted in rigidities in the labour market and in the wage structure of the country and corruption.

2. Against the backdrop of inflationary threats, we also recommend that the CBN should moderate its current policy stance, lower interest rates and control the growth of money in order to...
boost investment and economic growth. This would encourage small scale businesses to emerge in order to reduce the unemployment rates. The government should also reduce the excessive reliance on the oil industry. There is need for diversification of the economy to other productive sectors using modern technology and in tune with the trend of globalization.

3. Expenditure management and budget discipline should be taken seriously by Nigerian government since the monetary authorities use monetary and fiscal policies measures as tools for combating inflation and meeting various macroeconomic objectives.

4. Government should vigorously adopt and pursue policies such as encouragement of family planning to further reduce population growth rate. This will reduce excess demand for goods over their supply. Hoarding of any kind should be prohibited with necessary sanctions on defaulters. Again, a good distribution network should be set up to eliminate dubious distributors who increase prices of their goods at each distribution stage for profits. This is another way to curb inflation.

7. CONCLUSION

In conclusion, the twin macroeconomic variables, unemployment and inflation are the major problems confronting Nigerian economy with complex economic and social outcomes. The inability of government to find a lasting solution to these problems has affected the economic life, economic activities and political system of the country as a whole. Therefore, this paper attempted to investigate the Phillips curve as a relevant tool for regulating the activities of the economy. The findings revealed that Phillips curve does not hold for Nigeria. Therefore, there is a need for strong institutional collaboration for dealing with these two macroeconomic variables; unemployment and inflation as have been recommended above.

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