2

An Analysis of the Relationship Between Unemployment, Inflation and Economic Growth in Nigeria: 1986-2015.

Emily Joshua Gyang
Department of Economics, Bingham University, Karu.
emilyjoshuagyang@gmail.com

Prof. Elias Anzaku
Department of Economics, Nasarawa State University, Keffi.

Anna Dyaja Baba Iyakwari
Department of Economics, Bingham University, Karu.
berlinlove37@yhaoo.com

Felicia Eze
Entrepreneurship Development Center, Bingham University, Karu.
felijbong@gmail.com

Abstract

The Nigerian economy has remained largely underdeveloped despite the increases in growth rate declare every year. The per capita income is low, unemployment and inflation rates are high, thus leading to many socio-economic challenges. It is against this background that this study examined the relationship between unemployment, inflation and economic growth in Nigeria for the periods 1986 to 2015 using the Ordinary Least Squares (OLS) Method. The stationery properties of the variables were tested using the Augumented Dickey Fuller Test (ADF), while the Johansen Co-integration and the Granger Causality Tests were employed to determine the long run relationship and direction of causality of the variables respectively. The estimated regression showed Unemployment and Inflation were not statistically significant in explaining growth in the economy for the periods under review. The study therefore recommended that policy direction should focus on creating job opportunities for both uneducated and educated individuals by stimulating economic activities within the real sector of the Nigerian economy and pursuit of expansionary fiscal policies that could boost economic growth in the long-run.

INTRODUCTION

Unemployment and inflation remain burning issues in any economy. All policymakers would to a large extent, wish to have low rates of unemployment and inflation without recession. It is often

argued that a single-digit rate of inflation and an unemployment rate of about five percent 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 (Saaed, 2007).

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).

According to Oye (2011), 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 (Avguoleas, 2008).

The concepts of unemployment and inflation are of the most important economic phenomena, which are facing any economy in the world. Therefore, unemployment, inflation are of the basic economic issues, which direct government policies and programs, so the government conducts economic reform programs aimed at addressing these problems to keep on stable price level and low unemployment rate. Otherwise the government will gamble the economic growth.

Nigeria's inflation rate is still well up into the double digits mark of 11.61% (NBS, 2018). According to the latest report from the National Bureau of Statistics (NBS), 2018, the unemployment rate in Nigeria has risen above single digit (18.8%) and the Gross Domestic Product (GDP) has steadily declined from N69023.93bn in 2015 to N67931.24bn in 2016 (CBN, 2016).

In any economy, inflation and unemployment are always on the "front burner"; all economies will always desire to keep them both on a low rate mostly on a single-digit rate because this will tend to bring about stability in the macroeconomic policies of the country. This stability is pivotal to effectively achieve growth and development in the economy and also the attainment of its set out goals and objectives of its economic policies (Umaru&Zubairu, 2012).

For several decades, economic indicators have not been impressive. The continued economic crisis, with the associated problems of high rate of unemployment and underemployment, low wages and poor working conditions and high inflation rate in developing country like Nigeria, calls for attention of economists, policymakers and researchers alike (Thomas, 2012).

This is because unemployment and inflation are some of the key macroeconomics indicators and determinants of economic growth and development any economy. The Nigerian economy has remained largely underdeveloped despite the increases in growth rate declare every year. The per capita income is low, unemployment and inflation rates are high. There are many socio-economic challenges. The economy has continued to witness economic recovery which is immediately followed by economic recession and depression (Aminu and Donga 2014).

The unemployment situation in Nigeria has become critical and labour absorption problematic. The problem has increasingly come to be recognized as one of the serious socio-economic problems currently confronting Nigerian economy (Umaru, 2012). Previous governments in their own capacities have been embarking on various policies to control inflation and reduce the level of unemployment in the country. However, these efforts have not yielded the desired results as these problems are known to be skyrocketing rather than plummeting (Itua, 2000).

The increase in unemployment in Nigeria, on the other hand, has resulted in decrease in consumption, due to low income earned by the citizens, thereby resulting to low production- the inability of firms to sell their goods, forces them to reduce their output. This has led to decrease in the economic growth of the nation. It is against this problem that the study examines unemployment, inflation and economic growth in Nigeria spanning from 1986 -2015.

The rest of this paper is divided into five sections. Section 2 provides a summary of the theoretical framework and literature review. This is followed by the analytical framework and methodological approaches articulated in section 3. The main results of the study are presented in section 4. Section discusses summary of the main results and policy recommendations.

LITERATURE REVIEW
Conceptual Review of Literature
Unemployment:

In general sense of the term, unemployment is a situation in which those who are able and willing to work at the prevailing wage rate do not find job. According to the International Labour Organisation (ILO), only those belonging to the age group of 15 to 65 years should be included in the labour force of a country. Unemployment may also be defined as the gap between the potential full employment and the number of employed persons. Briggs (1973) defined unemployment as the difference between the amount of labour at current wage rate and working conditions and the amount of labour not hired at these levels. However, Gbosi (1997) defined unemployment as a situation in which people who are willing to work at the prevailing wage rate are unable to find jobs. National Bureau of Statistics (N.B.S). Nigeria defines unemployment as the proportion of the labour force that is available for work but did not work for at least thirty nine (39) hours in the week preceding survey period.

The Marxist theory noted that unemployment is as a result of unstable capitalist system via which unemployment rate perpetuates causing laborers to settle for fair wages. They argued that to eliminate unemployment completely, capitalism must be abolished completely, replacing it with socialism. The Keynesian economist holds that increased unemployment is as a result of fall in the aggregate demand in an economy. Phillips (1958) in his study on unemployment and rate of money wage in the British economy noted that increase in unemployment in the economy causes inflation to drop which he referred to as a trade-off between the variables. He concluded that as employment level increases, inflation rises, but as unemployment increases, inflation falls as the purchasing power of the economy becomes weaker.

Okun (1962) propounded that as unemployment falls by 1%, gross domestic product increase by 3%, but this was criticized because it holds for the United States only. Taylan (2012) noted in his theory "Search Theory of Unemployment" that as an individual is searching for job, firms are also searching to fill a vacant space. He concluded that wages therefore decides for both the individual and the firm.

Inflation:

The concept of inflation has been define as a persistence rise in the general price level of broad spectrum of goods and services in a country over a long period of time. Inflation has been intrinsically linked to money, as captured by the often heard maxim "inflation is too much money chasing too few goods". According to Hamilton (2001), inflation has been widely described as an economic situation when the increase in money supply is faster than the new production of goods and services in the same economy. Piana (2001) noted that economists usually try to distinguish inflation from an economic phenomenon of a onetime increase in prices or when there are price increases in a narrow group of economic goods or services.

According to Ojo (2000) and Melberg (1992) the term inflation describes a general and persistent increase in the prices of goods and services in an economy.

Inflation rate is measured as the percentage change in the price index (consumer price index, wholesale price index, producer price index etc). Essien (2002) opine that the consumer price index (CPI), for instance, measures the price of a representative basket of goods and services purchased by the average consumer and calculated on the basis of periodic survey of consumer prices. Owing to the different weights the basket, changes in the price of some goods and services have impact on measured inflation with varying degrees. There are several disadvantages of the CPI as a measure of price level. First, it does not reflect goods and services bought by firms and/or government, such as machinery. Secondly, it does not reflect the change in the quality of goods which might have occurred overtime. Thirdly, changes in the price of substitutable goods are not captured. Lastly, CPI basket usually does not change often. Despite these limitations, the CPI is still the most widely used measurement of the general price level. This is because it is used for indexation purposes for many wage and salary earners (including government employees).

Another measure of inflation or price movements is the GDP Deflator. This is available on an annual basis. However, it is rarely used as a measure of inflation. This is because the CPI represents the cost of living and is, therefore, more appropriate for measuring the welfare of the people. Furthermore, because CPI is available on a more frequent basis, it is useful for monetary policy purposes.

In recent times, there have been three dominant schools of thought on the causes of inflation; the neoclassical/monetarists, neo-Keynesian, and structuralists. The neo-classical/monetarists opine that inflation is driven mainly by growth in quantum of money supply. However, practical experiences of the Federal Reserve in the United States (US) have shown that this may not be entirely correct. Hamilton (2001) and Colander (1995) the US money supply growth rates increase faster than prices itself. This has been traced to the increased demand for the US dollar as a global trade currency. The neo-Keynesian attributes inflation to diminishing returns of production. This occurs when there is an increase in the velocity of money and excess of current consumption over investment. The structuralists attribute the cause of inflation to structural factors underlying characteristics of an economy (Adams, 2000). For instance, in the developing countries, particularly those with a strong underground economy, prevalent hoarding or hedging, individuals expect future prices to increase above current prices and, hence, demand for goods and services are not only transactionary, but also precautionary. This creates artificial shortages of goods and reinforces inflationary pressures.

Empirical Review of Literature

Umaru and Anono (2012) investigated the relationship between unemployment and inflation in the Nigerian economy between 1977 and 2009 through the application of Augmented Dickey-Fuller techniques to examine the unit root property of the series after which Granger causality test was conducted to determine causation between unemployment and inflation, then

cointegration test was conducted through the application of Johansen cointegration technique to examine the long-run relationship between the two phenomenon, lastly ARCH and GARCH technique was conducted to examine the existence of volatility in the series. The results indicate that inflation impacted negatively on unemployment. The causality test reveals that there is no causation between unemployment and inflation in Nigeria during the period of study and a long-run relationship exists between them as confirmed by the cointegration test. ARCH and GARCH results reveal that the time series data for the period under review exhibit a high volatility clustering. The paper recommends the use of inflation/unemployment theory in order to ensure their applicability in the Nigerian context, so as to achieve a desire reduction in unemployment and inflation which in turn boost economic growth and development.

Zeaud (2014) on the other hand investigated the existence of trade-off relationship between unemployment and inflation in the Jordanian economy between 1984 and 2011. Each of Granger-causality test is adopted to check relationship between variables and the direction of causation. Since these techniques are sensitive to stationary, integration and co-integration of the variables ADF and PP tests is applied to test the Stationary and integration order of the series while Johansen-Juselius procedure is carried out to explore the existence of co-integration between variables. The tests reveal that the variables' series have different degrees of integration, thus, their second differenced series - which have the same degree of integration- have been used to inquire about causality between the two phenomena. The results shown no causal relationship between unemployment and inflation in Jordan during the study period which means there is no trade-off relationship between the two variables.

Thayaparan (2014) examines the effect of inflation and economic growth on unemployment in Sri Lanka for the period 1990-2012. To test unit root or stationary, Augmented Dickey Fuller Test was used. In addition to that, ordinary least square technique and to determine the causality among the above variables Granger Causality test also were applied. Results of the unit root test indicate that only Gross Domestic Product (GDP) has stationary and unemployment and inflation have unit root problem or non- stationary at level. But when these two variables are tested at first difference then the problem of unit root has disappeared and hence they have become stationary at first difference. Regression results revealed that the coefficient of inflation is negative and statistically significant influence on unemployment whereas gross domestic product is positive but it has no significant effect on unemployment. Finally the study concludes that only inflation significantly reduces unemployment and gross domestic product positively but insignificantly influences on unemployment. Causality results proved that there is only a unidirectional causality between inflation and unemployment.

Bello and Auwal (2015) in their study examined how unemployment and inflation substantially affect economic growth. Ordinary Least Square (OLS) method, Augmented Dickey-Fuller (ADF) technique and Granger causality test. The result of the regression revealed that the coefficient of inflation is positive and statistically significant while unemployment is positive but has no significant effect on economic growth. This proves that inflation substantially affect economic growth, although unemployment has little substantial effect on it. Moreover, result of the unit root indicates that all the variables in the model are stationary whereas, the result of causality test suggests that unemployment does not granger causes economic growth and inflation, but economic growth and inflation Granger cause unemployment, also there exist Granger causality between economic growth and inflation. Therefore, the result suggests a one-way causation flowing from inflation to GDP. Consequently, the major policy implication of these results is that concerted efforts should be made by policy makers towards restructuring the economy, managing price instability and improving infrastructure.

Orji et.al (2015) examined the inflation and unemployment nexus in Nigeria. The study adopted a distributed lag model with data covering the period 1970-2011. 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.

Ademola and Badiru (2015) determine the effects of unemployment and inflation on economic performance in Nigeria 1981 to 2014. Ordinary Least Square (OLS) technique was adopted with various diagnostic tests to determine how fit are the data for the analysis. The result of Diagnostic test indicates that data for the analysis are stationary at level and there are 2 cointegrating equation implying that there exist long-run relationship between RGDP, Unemployment and inflation. The results indicated that unemployment and inflation are positively related to economic growth. The positive relationship between unemployment, inflation and RGDP indicates that Nigeria RGDP is driven by oil revenue that employs very limited highly skilled labour and the price of output of crude oil is determined externally which may not response as expected to growth of output in the country.

Although a good deal of research work has been carried out on unemployment, inflation and economic growth worldwide, not much has been carried out looking at the causal relationship. When the time period is being considered, this work will serve as one of the most recent research works on the topic. The gap in the literature can be noted from the fact that most literature reviewed focused their attentions on the unemployment and inflation and their effect on economic growth from 1980 to 2014, this research work intend to fill the gap in the literature by discussing extensively on the causal relationship between unemployment, inflation and economic growth from 1986 to 2015.

METHODOLOGY
Research Design/Analytical Technique:
This study employs the inferential method in evaluating the Relationship between Unemployment, Inflation and Economic Growth in Nigeria for the periods 1986-2015. It adopts the Ordinary Least Square Method (OLS) for estimation. The stationary properties of the variables are determined using the Augumented Dickry-Fuller Test, while the Johansen Co-integration and the Granger Causality test are employed to determine the presence or otherwise of long run relationship and causality among the variables. Secondary time series data on GDP, unemployment and inflation in the Nigerian economy from 1986 to 2015 were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin and journals articles.

Model Specification:
The main objective of this study is to examine the impact of monetary policy on economic growth in Nigeria. For this purpose the model adapted for this study is predicated on a modified model Jelilov (2016) who examined the relationship between economic growth, inflation and unemployment in Ten (10) Selected Member's States of Economic Community of West Africa States between 2001 and 2014. The preferred model is represented as equation 1 below:

$$InRGDP = \beta_0 + \beta_1 InUNR + \beta_2 InINFR + \beta_3 InBMS + \beta_4 InTGE + \mu$$

Where:
RGDP = real gross domestic product;
UNR = unemployment rate;

INFR = inflation rate;

BMS = broad money supply;

TGE = total government expenditure;

μ= other variables not explicitly included in the model.

3.3 *apriori* Expectation:

Based on the few existing empirical analysis, we expect that UNR and INFR be negatively related to RGDP, while BMS and TGE is expected to be positively related to RGDP for the period under review. Symbolically we have $\beta_1, \beta_2 < 0$, $\beta_3, \beta_4 > 0$

RESULTS AND DISCUSSION

Unit Roots Test

The unit root test results of the incorporated times series variables in our regression model are presented in Table 1 using the Augmented Dickey-Fuller (ADF) unit-root test.

From Table 1, the traditional test of the ADF indicates that all the variables tend to be stationary in first difference. Hence, the series are all integrated series of order 1(1). This is evidence by the fact that the Absolute Values of the ADF test statistics are all greater than the critical values at the 1% and 5% level of significance. After stationarizing the variables, the data can then be tested whether these variables are co-integrated or not by applying Johansen Co-integration procedure to test for long – run relationship between the dependent and independent variables.

Table 1: Unit Root Table using ADF

Variables	ADF statistics	Critical Value	Order of Integration
RGDP	-2.589	-1.956**	I(1)
UNR	-6.091	-4.324*	I(1)
INFR	-3.818	-3.574**	I(1)
BMS	-3.064	-4.416*	I(1)
TGE	-5.993	-4.324*	I(1)

Source: Author's computation (2018).

Note: * Indicates stationary at the 1% level, and ** Indicates stationary at 5% level.

Co-integration Test

This paper applied the Johansen co-integration technique to verify the existence of long – run co-integrating relationship or whether the variables share mutual stochastic trend and are linked in a common long-run equilibrium. The Johansen co-integration procedure is based on trace statistics or likelihood ratio and the critical value. The result is presented in table 2 below.

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.648098	80.25125	69.81889	0.0058
At most 1 *	0.584788	51.00797	47.85613	0.0245
At most 2	0.430455	26.39695	29.79707	0.1173
At most 3	0.291061	10.63526	15.49471	0.2349
At most 4	0.035210	1.003667	3.841466	0.3164

Source: Author's computation (2018).

From the result, there are two co-integrating vectors, implying the presence of a long-run equilibrium relationship between RGDP and the explanatory variables. This is because the Trace Statistic value of 80.25125 is greater than 69.81889 at the 5% level.

Granger Causality Test

Having established the long-run relationship among the variables, this section determines the direction of causality between the dependent variable and the independent variables. The Pairwise Granger Causality test result is presented in Table 3.

Table 3: Johansen Granger Causality Test Result

Null Hypothesis:	Obs	F-Statistic	Prob.
UNR does not Granger Cause RGDP	28	0.43360	0.6534
RGDP does not Granger Cause UNR		0.17758	0.8384
INFR does not Granger Cause RGDP	28	0.32470	0.7260
RGDP does not Granger Cause INFR		6.92336	0.0044
BMS does not Granger Cause RGDP	28	3.03026	0.0679
RGDP does not Granger Cause BMS		217.053	1.E-15
TGE does not Granger Cause RGDP	28	5.48199	0.0113
RGDP does not Granger Cause TGE		0.77933	0.4705

Source: Author's computation (2018).

The granger causality test results in Table 3 above shows that at lag 2 and 5% significance level, the null hypotheses of "UNR does not Granger cause RGDP" and "INFR does not Granger cause RGDP" were not rejected. Also the Hypothesis that BMS does not granger cause RGDP was not rejected at the 5% level. The result however indicate that significant causality runs from the value of TGE to RGDP. This implies that unidirectional relationship exists between TGE and RGDP. A unidirectional causality implies that increase in TGE leads to an increase in RGDP in the economy. The evidence of this claim is supported by the p-value of 0.0113 is less than the 0.05 level of significance. Therefore UNR and INFR does not granger cause RGDP for the period under review.

Discussion of Findings
Table 4: Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2797139.	11994535	0.233201	0.8175
UNR	-205066.0	1541244.	-0.133052	0.8952
INFR	-99994.50	334518.7	-0.298920	0.7675
BMS	-2.478576	0.483096	-5.130612	0.0000
TGE	13.14017	1.488227	8.829408	0.0000

R-squared	0.850820	Mean dependent var	13419748
Adjusted R-squared	0.826951	S.D. dependent var	19836863
S.E. of regression	8251973.	Akaike info criterion	34.84081
Sum squared resid	1.70E+15	Schwarz criterion	35.07435
Log likelihood	-517.6122	Hannan-Quinn criter.	34.91552
F-statistic	35.64560	Durbin-Watson stat	2.002068
Prob(F-statistic)	0.000000		

Source: Author's computation (2018).

From the estimated regression results above, explanatory variables Unemployment Rate (UNR) and Inflation Rate (INFR) are negatively related to economic growth for the period under review and correctly signed.   This implies that holding other variables constant, a unit change in UNR and INFR will lead to a decrease in in Real Gross Domestic Product (RGDP) by N205, 066bn, and N99, 994bn respectively.

The R2 is 0.850820 meaning that the explanatory variables Unemployment Rate, Inflation Rate, Broad Money Supply and Total Government Expenditure accounts for approximately 85% variation in RGDP for the period 1986 to 2015. This shows that model has a good fit and may be suitable for policy analysis.

Also, the estimated long run result in Table 4 shows that at 5% level of significance the variables collectively influence the variation of economic growth as show by the F-statistic (35.64), and F. Prob (0.00). Additionally, it can be observed that the Durbin-Watson statistic (from table 4) is greater that the R- squared value. This is a sign that the model is a non-spurious regression.
From the result obtained in table 4 above, UNR and INFR were found to be statistically insignificant in stimulating growth for the period under review. This is evidenced as their p values is less than 0.05 level.

The findings also show that the Durbin Watson Statistic of 2.002068 is an indication that the model is free from autocorrelation. Consequently, the estimated model can be confidently relied upon for making inferences and for prediction purposes.

Test of Hypotheses
H01:   Unemployment Rate has no significant impact on economic growth in Nigeria
From the estimated regression result in Table 4, it was observed that the calculated t-value for the relationship UNR and growth in absolute terms is 0.13, while the tabulated (absolute) value is 2.06. Since the t-calculated is less than the t-tabulated (0.13<2.06), we therefore fail to reject the null hypothesis and conclude that unemployment rate is not statistically significant in stimulating growth for the period under review.

H02:   Inflation Rate has no significant impact on economic growth in Nigeria
The result in table 5 above also show that the calculated t-value for the relationship INFR and growth in absolute terms is 0.29, while the tabulated (absolute) value is 2.06. Since the t-calculated is less than the t-tabulated (0.29<2.06), we therefore fail to reject the null hypothesis and conclude that inflation rate is not statistically significant in stimulating growth for the period under review.

Policy Implication of Findings
The study examines the relationship between Unemployment, Inflation and economic growth in Nigeria for the periods 1986 to 2015.   The result from the regression result shows that Unemployment Rate (UNR) and Inflation Rate (INFR) but have negative and insignificant contribution to the growth of Nigerian domestic economy for the period under review.
This outcome invalidates the initial work of Ademola and Badiru (2015) who had earlier postulated a positive relationship between unemployment, inflation and economic performance in Nigeria for the periods 1981 to 2014.

The policy implication of these exposition lies in the fact that for the Nigerian economy to experience any meaningful growth, efforts must be made by the government to provide enabling environment for job creation. The government must as a matter of urgency create avenues where

the unemployed can find suitable jobs to do. Steps must also be taken improve on the ease of doing business so as to encourage investors and small scale enterprises to set up businesses in Nigeria. Government must also ensure the diversification of the economy from oil to agriculture and industrialization to ensure that people are massively engaged.

The government must also ensure that inflation is curtailed through well thought out monetary and fiscal policies. Policies that will lead to a reduction in production cost, decrease in money supply, massive production of goods, and reduction in imports will help stem the tide of inflation.

CONCLUSION AND RECOMMENDATIONS

The study investigates the relationship between unemployment, inflation and economic growth in Nigeria for the periods 1981 to 2016. The Johansen Co-integration test, Pairwise Granger Causality Test and the Ordinary Least Squares (OLS) were used in the analysis. The unit root test results indicated that all the variables were stationary at the first difference I(1). The co-integration test showed evidence of long run equilibrium relationship among the variables since the estimation result indicated at least two co integrating equation. The result of the Pairwise Granger causality test indicated no causal relationship between unemployment, inflation and growth.

Furthermore, the results of the Ordinary Least Squares (OLS) indicates that Unemployment Rate (UNR) and Inflation Rate (INFR) but have negative and insignificant contribution to the growth of Nigerian domestic economy, while Total Government Expenditure (TGE) show a positive and significant relationship to economic growth for the period under review.

Based on the findings from this research, we are of the opinion that to maintain single digit inflation and to reduce the ever increasing unemployment in Nigeria, policy direction should focus on creating job opportunities for both uneducated and educated individuals by stimulating economic activities within the real sector of the Nigerian economy as it is the pillar upon which the government's objective of inclusive growth and poverty reduction hinges.

Finally, empirical result showed that government expenditure coefficient is directly related to economic growth during the study period. Thus, government expenditures are beneficial to economic growth. The study therefore, recommends expansionary fiscal policies that could boost economic growth in the long-run.

REFERENCES

Ademola, A and Badiru, A (2015). The Impact of Unemployment and inflation on Economic Growth in Nigeria (1981 – 2014), *International Journal of Business and Economic Sciences Applied Research*, 9(1), 47-55.

Adamson, Y.K.(2000). Structural Disequilibrium and Inflation in Nigeria: A Theoretical and Empirical Analysis. Center for Economic Research on Africa. New Jersey 07043: Montclair State University, Upper Montclair.

Aminu, U. & A.Z. Anono, 2012, 'An empirical Analysis of The Relationship between Unemployment and Inflation in Nigeria from 1977-2009', *Business Journal, Economics and Review,* 1(12), 42-61.

Bello M & Auwal, A. (2015). Do Unemployment and Inflation Substantially Affect Economic Growth? *Journal of Economics and Development Studies*, 3(2), 132-139.

Colander, D.C. (1995). Macroeconomic. Second Edition. United States of America: Richard D. Irwin, Inc.

Essien, E.A. (2005). Exchange Rate Pass-Through to Inflation in Nigeria. West African Journal of Monetary and Economic Integration (First Half), Vol. 5, Number 1, Accra: West African Monetary Institute.

Itua, G (2000) "Structural Determinants of Inflation in Nigeria (1981-1998).

Melberg, H.O.(1992). Inflation: an overview of Theories and Solutions (www.geocities.com/hmelberg/papers/921201.htm).

Nwaobi, G. C. (2009) money and output Interaction in Nigeria: An Econometric Investigation Using Multivariate Cointegration Technique". *Central Bank of Nigeria Economic and Financial Review,* 42(3). 1-19.

Ojo, M.O. (2000). The role of the Autonomy of the Central Bank of Nigeria (CBN) In Promoting Macroeconomic Stability. Central Bank of Nigeria Economic and Financial Review, Vol.38, Number 1, March.

Oye, D., & Inuwa, I. (2011). Unemployment in Nigeria: Implication of the Gross Domestic Product. *International Journal of Economic Resources.* 2(1), 66-71

Orji, A., Orji-Anthony, I., & Okafor, J. (2015). Inflation and Unemployment Nexus in Nigeria: Another test of the Phillip's Curve. *Asian Economic and Financial Review,* 1(4), 2-23.

Okun, A.M. (1962). Potential GNP: Its measurement and significance, American Statistical Association, Proceedings of the Business and Economics Statistics Section, pp. 98–104.

Phillips, A.W. (1958). The relationship between unemployment and the rate of change of money wages in the United Kingdom 1861-1957. Economica, 25(100), pp. 283–299.

Thayaparan, A (2014). Impact of Inflation and Economic Growth on Unemployment in Sri Lanka: A Study of Time Series Analysis. *Global Journal of Management and Business Research: Economics and Commerce,* 13(5), 1-11.

Thomas, P. (2012). The Economics of Phillips Curve: Formation of Inflation Expectation Versus Incorporation of Inflation Expectations, Structural Change and Economic Dynamics, 23: 221-230.

Ugwuanyi, C. (2004). *.Intermediate Macroeconomics Theory.* Enugu: Great AP Express Publishers. Limited.

Umaru, A. & Zubairu, A. A. (2012b). Effect of inflation on the Economic Growth and Development of the Nigerian Economy" An Empirical Evidence. *International Journal of Business and Social Science*, 3 (10): 183-191.

Umaru, A. & Zubairu, A. A. (2012a). An Empirical Analysis of the Relationship between Unemployment and Inflation in Nigeria. *Economic and Finance Review,* 1(12): 42-61.

Saaed, A., (2007). Inflation and Economic growth in Kuwait: 1985-2005 Evidence from cointegration and error correction model. *Applied Econometrics and International Development*, 2(7), 1-23.

Taylan, T.D. (2012). Macroeconomic variables and unemployment: the case of Turkey. International Journal of Economics and Financial Issues, 2(1), pp. 71-78.

Zeaud, H (2014). The Trade-Off between Unemployment and Inflation Evidence from Causality Test for Jordan. *International Journal of Humanities and Social Science,* 4(4), 1-9.