J. Soc. Sci. Hum. Stud., 1(3)1-6, 2015

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ISSN 2356-8852
Journal of Social Sciences and Humanity Studies
www.textroad.com

Nigeria Economy Growth and inflation drift system

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Received: February 16, 2015
Accepted: May 1, 2015

ABSTRACT

Inflation has been one of the major macroeconomic problems confronting developing countries but the study narrated the Nigeria experience on their preparedness to combat inflation drift. Inflation is the most complex and serious set of economic problem confronting national government and the international community since the end of World War II, consist of virulent and widespread inflation, a declaration of economic growth and massive disequilibrium of international payments. The broad objective of this study is to examine inflation and economy growth in Nigeria. The study covered the ten year period from 2002 to 2012 and Ordinary Least Squares (OLS) regression technique was used. The data were collected from published central bank of Nigeria (CBN) and National Bureau of statistics (NBS).The results show that inflation has a negative effect on exchange rate, consumer price index (CPI) and economic growth in Nigeria. But there exist a positive relationship between inflation and gross domestic product (GDP).

KEY WORDS: Nigeria, Economic, Growth, Inflation Drift.

INTRODUCTION

Economic growth is defined as "the process whereby the real per capita income of a country increases over a long period of time (Jhingan, 2003). Economic growth is measured by the increase in the amount of goods and services produced in a country. A growing economy produces more goods and services in each successive time period. Thus, growth occurs when an economy's productive capacity increases which in turn, is used to produce more goods and services. A growing economy is a changing economy. Evermore, growth does not appear to make us any happier once we have reached a certain standard of living (Layard, 2005). As such, economic growth in its wider aspect implies raising the standard of living of the people and reducing inequalities of income distribution.

In Nigeria, inflation has gradually established a firm grip on the economy of the nation since her Independence. However, despite the slightest increase of 1961, 1962 and 1966, the first nine or ten years after independence can be regarded as a period of relative stability in prices when compared with the prices of the 1970_S and 1980_S as only a single digit inflation was recorded in the 1960_S. Nigeria has consistently had double digit inflation for the past decade. Today, Inflation is no longer a mere war-time phenomenon or the problem of a specific region or society. Its impact can no longer be ignored by both the developed and developing nations alike. Inflation is defined as a generalized increase in the level of price sustained over a long period in an economy (Lipsey and Chrystal, 1995).

Inflation is a household word in many market oriented economics. According to IMF (1974) "the most complex and serious set of economic problems to confront national government and the international community since the end of World War II, consist of virulent and widespread inflation, a deceleration of economic growth and massive disequilibrium of international payments. Inflation surely is not a new phenomenon in the Nigerian Economy and across the globe. It has been a major problem in the country over the years. However, the phenomenon actually assumed a disturbing dimension since World War I. It was then that inflation for the first time was put at the centre of the global stage.

Over the years, the Nigerian Economy has been confronted with problem of controlling inflation to bring a better performance of the economy. Thus, this research is carried out as a result of the instability in price level and the dissatisfying result it has on the growth rate of an economy. Basically, the price level is determined by interaction of demand and supply. Inflation redistributes income and wealth in a society, creates advantages to some, while to others disadvantages. It also affects production and the society as a whole.

During inflation, the traders, industrialists, producers etc, gain immensely, as production is encouraged, because the value of their inventories rises in the same proportion, so they profit more. Unlike the salary and wage earners who lose during inflation. It also hinders foreign capital, as the rising costs of materials and other input (i.e. price instability) discourages foreign direct investment, which is a factor of economic growth. Inflation also brings about drastic reduction in purchasing power and balance of payment problem in a country. This research work therefore, attempts to assess the impact of inflation on both the redistribution of income, production and on the Nigerian economy as a whole.

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SIGNIFICANCE OF THE STUDY

A vital component of any move towards macroeconomic stability and growth is an integrated effort towards price stability. In order to identify the macroeconomic effect of inflation persistence on the Nigeria economic growth; this study is significant in the following ways:-

- It would have a direct effect on the efficiency and effectiveness of the use of monetary policy instruments in the stabilization of macroeconomic variables to stimulate production and investment.
- It would also provide an explanation for Nigeria's stunted growth.
- This research would also be of relevance to investors, shareholders, bankers, government, producers etc. and the public who need to have knowledge of inflation and economic growth, effects and preventive measures in the Nigeria economy.
- To the producers: It would enable them to know when to produce in large quantity. As production is encouraged when price starts rising with the anticipation of higher profits in future.
- To the investors and shareholders: It would serve as a guide to know the movement of their investment; to know if returns on investment are expected or not.

CONCEPTUAL AND THEORETICAL FRAMEWORK

According to Afolabi (1991), "Inflation is used to describe a situation of rapid, persistent and unacceptably high rises in the general price level in an economy, resulting to general loss of purchasing power of the currency".

Friedman (1970) considers that "inflation is a condition where there is general excess demand in which too much money is chasing too few goods".

Iyoha (2003), "inflation is a condition of general and persistent rise in prices".

Dernberg, P. O and Dougal, M. C (2003) are more explicit when they write that "inflation usually refers to a continuing rise in prices as measured by an index such as the consumer price index".

The monetarist essentially believes that the increase in aggregate demand is influenced almost entirely by the amount of money in the economy i.e. the money supply. They argue that inflation in the economy is when the spending power of the population exceeds the capacity of the country to produce goods and services.

From the above numerous definition of inflation, inflation has been properly defined and explained to be the increase in the general price level of goods and services, as a result of too much money chasing fewer goods.

TYPES, EFFECTS AND CAUSES OF INFLATION IDEAS WERE BORROWED FROM MACROECONOMIC BOOK WRITTEN BY PROFESSOR J.M. KAYNES:

- **RUNNING INFLATION**

It involves more accelerated movements in prices than in either the creeping or walking inflation. When prices rise rapidly at the rate of 10% - 20% per annum, it is referred to as running inflation.

- **Cost – Push Inflation**

It is also known as "supply shock inflation". It is the increase in the cost of production for goods and services due to wage increase. It is caused due to the rise in money wages more rapidly than productivity of labour. Cost push inflation is also caused by profit – push inflation, as oligopolistic and monopolistic firms raise the price of their products to offset the rise in labour and production costs so as to earn higher profits. It is caused by a drop in aggregate supply (potential output).

- **CREEPING INFLATION**

It is usually referred to as a rate of inflation that is less than 5% annual increase in price. It is a slow but continuous inflation, though it seems tolerable in the short run, nevertheless leads to significant long run price increase. Such increase in prices is regarded safe and essential for economic growth.

- **WALKING INFLATION**

This is when prices rise moderately and the annual inflation rate is a single digit i.e. the rate of rise in prices is in the intermediate range of 3% - 7% or less than 10 % per annum. Inflation at this rate is a warning signal for the government to control it, since it may be the prelude of a faster increase in prices.

- **HYPER INFLATION**

In this case, prices rise very fast at double or triple digit rates, from more than 20% - 100% per annum. It is a situation when the rate of inflation becomes immeasurable and absolutely uncontrollable. It results to a fierce and continuous increase in cost of production. Such a situation brings a total collapse of the monetary system because of the continuous fall in the purchasing power of money.

- **Demand Pull Inflation**

Also known as excess demand inflation is the most common inflation. It occurs when aggregate demand for goods and services is rising or exceeds the available supply of goods in an economy. When the supply of goods is less, the prices begin to rise in response to a situation often described as "too much money chasing too few goods".

- **Monetary Inflation**

It is a sustained increase in the money supply of a country, due to printing of more money by a government to cover its deficits. The monetarist believed the most significant factor influencing inflation is how fast fiscal policy or government spending and taxation are ineffective in controlling inflation. According to the famous monetarist economist Milton Friedman "Inflation is always and everywhere a monetary phenomenon". Monetarist asserts that the empirical study of monetary history shows that inflation has been a monetary phenomenon (Andrew, 2005).

Inflation is caused when the aggregate demand exceeds the aggregate supply of goods and services. We analyse the factors which lead to increase in demand and the shortage of supply.

- **Increase in money supply:** Inflation is caused by an increase in the supply of money which leads to increase in aggregate demand. The higher the growth rate of the nominal money supply, the higher is the rate of inflation.
- **Increase in disposable income:** When the disposable income of the people increases, it raises their demand for goods and services. Disposable income may increase with the rise in National income or reduction in taxes.
- **Cheap monetary policy:** The policy of credit expansion also leads to increase in the money supply. When credit expands, it raises the money income of the borrowers which in turn raises aggregate demand relative to supply, thereby leading to inflation.
- **Natural Calamities:** Drought or flood is a factor which adversely affects the supplies of agricultural products. The latter in turn, create shortages of food products and raw materials, thereby helping inflationary pressures.
- **Shortages of factors of production:** one of the causes affecting the supplies of goods is the shortage of such factors as labour, raw materials, power supply, capital etc. they lead to excess capacity and reduction in industrial production.

The effect of inflation could be on redistribution of income and wealth, production and on the society at large.

- **Effects on the redistribution of income and wealth:** Is based on the change in the real value of such factor incomes a wages, salaries, rents, interest, dividends and profits and on the basis of the size distribution of income overtime as a result of inflation. i.e., if thee income of the rich have increased and that of the middle and poor classes declined with inflation. The businessmen, industrialists, traders, real estate holders and others with variable incomes gain during rising prices.

Unlike the salaried and wage earners, pensioners etc., who suffer loss during inflation due to fixed income payment which are slow to adjust when prices, are rising.

- **Effects on production:** During inflation, production is encouraged as producers earn windfall profits in the future. They invest more in anticipation of higher profits in the future. The effects of inflation on production is on misallocation of resources, as producers divert resources from the production of essential to non- essential goods from which they expect higher profits. It also hinders foreign capital inflow, because the rising costs of material and other inputs makes foreign investment less profitable. Also, results to reduction in production because the expectation of rising prices along with rising costs of inputs bring uncertainty.
- **Effects on the Government and society as a whole:** It helps the government in financing its activities through inflationary finance. As the money income of the people increases, government collects that in the form of taxes on incomes and commodities. As such, government revenues increase during inflation.

Balance of payment: Inflation affects the balance of payment of a country. When prices rise more rapidly in the home country than in foreign countries, domestic products become costlier than the foreign products. This tends to increase imports and reduce exports, thereby making the balance of payment unfavourable for the country.

Inflation can be controlled by increasing the supplies and reducing money income in order to control aggregate demand. Mentioned below are some methods used for an effective control of inflation.

- **Monetary Policies:** These refer to the combination of measures designed to regulate the value, supply and cost of money in an economy in consonance with the level of economic activity. These policies actually control the rise in demand, by increasing the rates of interest and reducing the supply of real money. The central bank adopts a number of methods to control the quantity and quality of credit. Thus, it raises the interest rate to discourage borrowing from both companies and households. With increase in interest rates, it simultaneously encourages the savings rate, owing to an escalation in the opportunity cost of expenditure. It also decreases the demand for loans, thereby limiting the growth of broad money.
- **Fiscal Policies:** This refers to government actions affecting its receipts and expenditure to produce desirable effects on the national income, production and employment. It is highly effective for controlling government expenditure, personal consumption expenditure and private and public investment.

In addition, the current inflation in Nigeria is a direct result of the policies of the Nigerian government to stimulate a fast rate of economic growth. These policies – monetary and fiscal policies contribute towards growth by helping to maintain stability of prices. So monetary and fiscal policies should be such as to encourage investment and control economic fluctuations in order to promote growth. Inflation is a condition, when the cost of services, coupled with goods rise and the entire economy seems to go haywire. Inflation has never done well

to the economy, as it affects all sectors of the economy, inflation and economic growth are parallel lines and can never meet, and it reduces the value of money and makes it difficult for the common people.

However, the rise in prices is inherent in the growth process. The demand for goods and services rises as a result of stepping up of investments on a large scale and consequent increase in incomes. This lead to inflationary rise in prices, especially when new resources are developed, and growth leads to the production of more commodities, the inflationary rise in prices will be checked, but the rise in prices will be there with the growth of the economy and it will be moderate and gradual. The trends of Inflation rate and gross domestic product growth rate (2002-2013):

YEAR	INFLATION RATE (%)	GDP GROWTH RATE (%)	CPI
2002	12.20	4.63	44.30
2003	23.80	9.57	54.90
2004	10.80	6.58	60.40
2005	11.60	6.51	67.40
2006	8.50	6.03	73.10
2007	6.60	6.45	77.90
2008	15.10	5.98	89.70
2009	13.90	6.69	102.20
2010	11.80	7.98	114.20
2011	10.30	7.45	126.00
2012	11.30	- 24.9	138.00
2013	10.40	7.89	156.56

Source: Combined Adapted from NBS & CBN Statistical Bulletin

RESEARCH METHODOLOGY

The study used time series data collected from published Central Bank of Nigeria and National Bureau of Statistics in Nigeria. Ordinal least estimate model is specified in different ways to achieve different objectives:

EXCH = *f* (INF, GDP, EXCH, CPI) μ ----------------------------- (1)

Where

EXCH = Exchange rate in Nigeria;

INF = Annual inflation rate in Nigeria;

GDP = Gross Domestic Product, a proxy for economic growth in Nigeria;

CPI = Consumer Price Index rate in Nigeria; and

μ = error term.

RESULT AND DISCUSSION

In the regression result, the R^2 obtained is 0.707 this implies that 70.7% of Exchange Rate is explained by the changes in the explanatory or independent variables while 29.3 per cent cannot be explained due to omission of key variables in the model and it can be controlled through dropping of insignificant variables in the model. This indicates that it is a good fit because it tends closer to one but the multiple coefficient of determination can still provide better result if the effect of multicollinearity is check properly. The F- statistics is used to test if there is a significant relationship between the dependent and independent variable in the regression equation. The findings are in line with Jhingan, Anyanwu, Obaseki, Omoke findings on study of inflation and gross domestic products of developing countries.

Calculated F is 5.633 while its probability value (Sig. F*) is 0.028. Since 0.028 is less than 0.05, we accept that the regression equation is statistically significant; meaning that there is a significant relationship between the dependent and independent variables in the regression equation. The Pearson Correlation shows the strength of relationship between variables. Correlation between Exchange Rate and Inflation Rate is -0.123 which implies a negative relationship between the two variables i.e. as exchange rate increases, inflation reduces. The correlation between exchange rate and GDP is -0.500 which implies a negative relationship between the two variables. This means that as exchange rate increases, GDP decreases. The correlation between exchange rate and CPI is 0.837 which implies a positive relationship between the two variables. This means that as exchange rate increases, CPI also increases. The constant value of 100.988 implies that without the predictors used, the exchange rate in Nigeria will increase by 100.988 units. A unit increase in inflation rate will lead to a 0.233 increase in exchange rate in Nigeria. Also, a unit increase in GDP will lead to a 0.008 decrease in exchange rate in Nigeria. Also, a unit increase in CPI will lead to a 0.375 increase in exchange rate in Nigeria. The result is supported by Aso, Udabah and Iloabachie findings on study of Economy integration.

Correlation between GDP and Inflation is 0.089 which implies a positive relationship between the two variables i.e. as GDP increases, inflation increases. The correlation between GDP and Exchange rate is -0.500 which implies a negative relationship between the two variables. This means that as the economy grows, exchange rate decreases. The correlation between GDP and CPI is -0.559 which implies a negative relationship

between the two variables. This means that as the economy grows CPI decreases. The constant value of 167.086 implies that without the predictors used, the GDP in Nigeria will increase by 167.086 units. A unit increase in inflation rate will lead to a 0.622 decrease in GDP in Nigeria. Also, a unit increase in exchange rate will lead to a 0.528 decrease in GDP in Nigeria. Finally, a unit increase in CPI will lead to a 1.198 decrease in GDP in Nigeria. The correlation between CPI and Exchange rate is 0.837 which implies a positive relationship between the two variables. This means that as CPI increases, exchange rate also increases. The correlation between CPI and GDP is -0.559 which implies a negative relationship between the two variables. This means that as CPI grows GDP decreases. The constant value of 124.550 implies that without the predictors used, CPI in Nigeria will decrease by 124.550 units. A unit increase in inflation rate will lead to a 0.878 decrease in CPI in Nigeria. Also, a unit increase in exchange rate will lead to a 1.617 increase in CPI in Nigeria.

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

This research work studied inflation and economic growth; as the Nigerian experience, with respect to its impact and relationship. It also studied the effects of some selected variables (GDP, Exchange rate, CPI) on inflation. The following findings were made from the research:

- Inflation has a negative effect on exchange rate in Nigeria. Exchange rate is the rate at which one currency will be exchanged for another. Thus, as exchange rate increases, inflation reduces. Also, inflation has a negative impact on consumer price index in Nigeria. As CPI grows, inflation rate decreases. Findings also revealed that inflation has a negative influence on economic growth in Nigeria. But that there exist a positive relationship between inflation and GDP, i.e. as inflation increases, GDP increases. Also that CPI and GDP has an inverse relationship, so a lower CPI will lead to an increase in GDP, which could suggest to investors that the economy is stronger and healthier than it really is.
- The inflationary problem in Nigeria could best be reduced to the barest minimum, by restoring equilibrium between demand and supply, by either lowering demand to the level of supply or increase supply to the level of demand. Thus, an effective cure to inflation lies in a judicious management of both demand and supply and the government should try and set up a marketing board so as to control the market prices of commodities, since it has in our practices that consumption remained the priority of mankind. The nation's monetary authority should develop and implement measures that will ensure that both inflation and foreign exchange rates are sustained at levels that will ensure increasing level of inflow of foreign direct investment, which is a factor of economic growth.

Based on this research, an economy cannot experience growth with a high inflation rate. As such, the monetary authorities should adopt measures to reduce inflationary pressure in order to ameliorate its effect on the GDP of Nigeria. Nigeria's grip on inflation rate is becoming consistent and with an impressive economic growth rate. So far a significant level and good track record is brewing. But looking at the country's misery indications intrinsically overwhelming poverty and crushing unemployment, this impressive growth is not making impact to the suffering masses that are without jobs and are etching out a living with less than two dollars per day. As such, these economic experiences cannot correlate with the economic expansion of the country's GDP. Positive economic growth should fundamentally ameliorate the misery index, least it becomes senseless and insignificant to the majority of Nigerians.

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