

Inflation Targeting and Economic Growth Nexus in Nigeria: Implications for Monetary Policy

Ewurum, Ngozi, C

Economics Department, Michael Okpara Univeristy of Agriculture, Umudike Umuahia
Email: dalingo@yahoo.com

Kalu, Chris U

Economics Dept, Nnamdi Azikiwe University, Awka, Nigeria
Corresponding Author's Email: cu.kalu@unizik.edu.ng

Nwankwo, Damian. J.

Economics and Finance Dept, Coventry University, United Kingdom
Email: danga4jesus@yahoo.co

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v7-i1/2550>

Published Date: 13 February 2017

Abstract

The study examined inflation targeting –economic growth nexus in Nigeria, with the aim of imbibing the useful lessons and avoiding the pitfalls from cross-country experiences. The study employed descriptive approach to the study with data sourced from the Central Bank of Nigeria Statistical Bulletin of various issues. Previous study was also consulted to enrich the work. The most salient observations from the study include first: all the countries that adopted inflation targeting recorded a reduced inflation figure and improved economic growth after adopting inflation targeting than before the adoption. Second, Nigeria is absent from the list of countries that have adopted inflation targeting as a monetary policy framework, while South Africa and Ghana are the only countries in Africa that have adopted inflation targeting. Based on the observations some recommendations were made, mostly the need for the monetary authorities in Nigeria to adopt and implement fully the framework considering the harmful and suicidal effect of inflation on economic growth and investment on the economy.

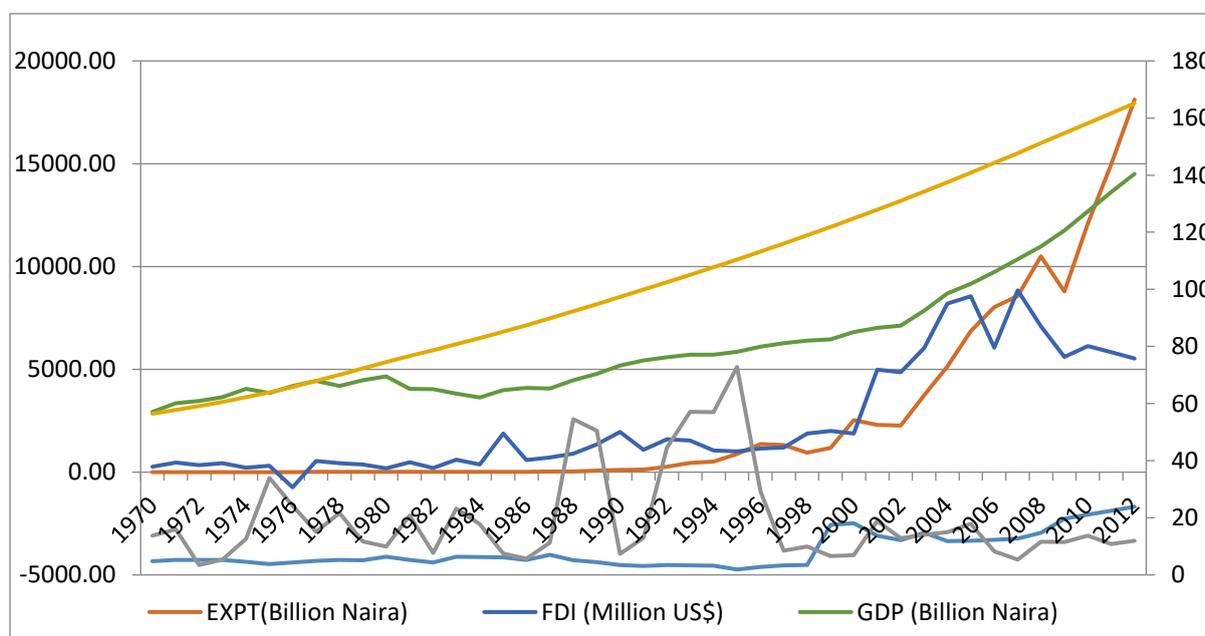
Keywords: Inflation Targeting, Economic Growth, Trends, Nigeria

Introduction

Inflation targeting was initially adopted by New Zealand in 1990 and the features and norms within the inflation targeting regime have been so powerful that some Central Banks of the industrialized and developing economies have declared that maintaining price stability of the lowest possible rate of inflation is their only mandate (Riti and Kama, 2015). It is generally

believed even now that price stability in a pre-condition for sustainable economic growth and employment and that high inflation is damaging to the economy in the long run. Inflation targeting, as a monetary policy framework is characterized by the monetary authority announcement of official quantitative targets (or target ranges) for the inflation rate over one or more time horizons and by explicit acknowledgement that low, stable inflation is monetary policy’s primary long run goal. Among other important features of inflation targeting are vigorous efforts to communicate with the public about the plans and objectives of the monetary policy and in many cases mechanisms that strengthen the Central Banks accountability for attaining the objectives (Bernake et al., 1999). Inflation targeting is usually associated with appropriate changes in the Central Bank’s rate that enhances the independence of the institution. On this assumption, Debelle (1997) observes that to promote the agreement between the Central Bank and the government and to increase the effectiveness and the credibility of inflation targeting framework in any country, the central bank should be responsible for announcing inflation target while government should only endorse it.

The role of inflation targeting as a tool for economic development cannot be overemphasize. Low and stable inflation is important for market-driven sustainable economic growth, and that monetary policy is the most direct tool for controlling inflation. Furthermore, among the entire government tools for influencing and directing the economy monetary policy has proven to be the most flexible instrument for achieving medium-term stabilization objectives (Adebayo, 2009). In Nigeria, inflation targeting has been accepted as the principle guiding monetary policy in the government and CBN. However, the Central Bank of Nigeria’s commitment to the effective implementation of the framework is yet to be seen. For example, CBN has not specified if targeting refers to core inflation or overall inflation or if the target is a specified level or a range.



Source: Author’s Plot

Figure 1 above traced the trend between inflation rate and macroeconomic variables relationship in Nigeria between the periods of 1970-2012. It could be observed that inflation rate have been on fluctuation over the years while economic growth (GDP) has maintained a

wide gap with inflation. This implies that the growth rate has not been able to induce inflation positively

There is a link between interest and inflation of rates. The relationship tends to be direct and positive. High inflation rates engender high interest rates. The high interest rates in Nigeria since the 1990s may have therefore been seen as a reflection of the inflationary trend in the economy. The generally high interest rate on loans and wide margin between lending and deposits rates created a disincentive to borrower and savers alike. This development tended to discourage investments in the real sectors of the economy where projects have longer maturity periods. High inflation rates over the years compounded the already poor economic environment. Throughout the 1990 and 2000 periods, the average inflation rate had been above the double digit level (26-51%) (CBN, 2009) which rendered most deposit refers negative in real terms. The beginning of inflation in Nigeria can be said to be a direct result of policies of the country's Governments to stimulate a fast rate of economic growth and development since 1951 when ministerial government was introduced (Anyanwu, 1993). Inflationary trend since independence shows a distinctive periods in terms of analysis. Until 1969, the growth rate of inflation was in the unit with the highest being about 9 per cent in 1966 and even negative growth rate was recorded in 1963, 1967 and 1968. Since 1969, the inflationary growth has become two digits, except in 1972, 1973 and 1982. 1975 recorded 33.7 per cent indicating the effect of the 1974 increase in money supply via Udoji Salary Awards in the face of inadequate supply of commodities. It was 11.4 per cent in 1980, 21 per cent in 1981, 7.7 per cent in 1982, 23.2 per cent in 1983, 40 per cent in 1984 and 40.9 per cent in 1989. Inflation was curtailed in the late 1990s when the country recorded single digit of 8.5 per cent and 6.6 per cent in 1997 and 1999 respectively. Inflation entered the two digit range between 2001 and 2004 when 18.9, 13.2, 14 and 15 per cent were recorded in 2001, 2002, 2003 and 2004 respectively. However, the rate peaked in 2005 with 17.9 per cent and later declined to 8.4 per cent in 2006 and further to 5.4 per cent in 2007. The emergence of global financial crisis (2008-2009) further increased inflation rate by 11.8 per cent. An outlook of the Nigerian inflation controls show that from one political administration to another, the Central Bank of Nigeria has tried to initiate various monetary policies in an attempt to control inflation. However, in spite of all these efforts and policy measures, inflation is relatively still very high and implication are on the drives of the economy's economic growth. The high inflation rate has helped to force up interest rate, thus deterring investments, and by reducing the real values of aggregate consumer wealth (such as government debt and money), it has inhibited and distorted consumer spending. Also, by raising domestic prices relative to foreign, the inflation inhibits exports and stimulate imports thus depleting the nation's scarce foreign reserves and worsening the balance of payments. The questions that the study tends to answer and which arises from the background and problem statement includes:

- What in the relationship between inflation targeting and economic growth in Nigeria?

The main objective of the study is to examine the relationship between inflation targeting framework and economic growth in Nigeria. The rest of the paper is organized as follows: Following the introduction is a survey of the literature which consists of the conceptual frameworks and empirical review. Section three is on the methodology while section four on the data and analysis. While summary, recommendations and concluding remarks are contained in section five.

Literature Review**Theoretical Literature**

This section reviews the previous studies concerning the subject matter. It provides a base for the objectives of the study and then the conceptual issues. The basic neoclassical growth has been the engine of discussion for economic growth theories. The neoclassical theory postulates that economic growth is a product of an accumulation of physical capital and labour for expansion in addition to the exogenous factors of technological progress. The fundamental growth of the neoclassicals is based on the work of Solow's growth model. The Solow model (1956) however, seems to be of variance with real facts about modern growth. Meanwhile, one of the limitations of the model is that, it fails to distinguish between potential output and income (GNP). It therefore not considers the changes in factors in the terms of trade and in the cash incurred in external borrowing (Khan and Villanueva, 1991). Economic growth proponents of the 1950's and 1960's are with the process of development as a series of successive stages of economic growth through which all the countries must pass. It was primarily an economic theory of development in which the right quantity of saving, investment and foreign aid were all that was necessary to enable developing countries to proceed along path that historical had been followed by the more developed countries. Conceptually, there is no generally accepted definition of inflation targeting in the literature. However, some fundamental features exist. First, writers including Bernake and Mishikin, (1997); Bernake et al (1999); King (2002); Kuttner and Posen (2000) refer to inflation targeting as a framework of constrained discretion in which the constraint is the inflation target which may be a point or a range and the discretion is the scope and flexibility to take account of economic and other considerations.

Pierre (1999) viewed it as a strategy in which the Central Bank adopts a numerical target for inflation and commits to achieving the target. Accounting to Tsenkwo (2010), the hallmark of inflation targeting is the announcement by the government, the Central Bank, some combination of the two that in the future the Central Bank will strive to hold inflation at or near some numerically specified level.

Eichgreen (2001) defined inflation targeting as a monetary policy operating strategy with four elements; an institutionalized commitment to price stability as the primary goal of monetary mechanism rendering the Central Bank accounting for attaining its monetary policy goals; the public announcement of target inflation; and policy of communicating to the public and the markets the rationale for the decision taken by Central Bank. Important features of an inflation target arrangement include the definition of what type of inflation is being targeted, the inflation target range, the use of exclusion clauses or caveat for example under what circumstances the central bank able to overshoot its target, and the target horizon

Conceptually, inflation targeting decreases monetary policy framework in which central banks accept and announce certain targets of inflation, over a given period of time, as measure of policy anchor and are accountable for deviation of actual from set targets. Three main forms of inflation targeting have been identified

- i. Full fledge inflation targeting that is, when a country is ready to adopt inflation target as its single nominal anchor upon which macroeconomic stability would be achieved. This is suitable with countries with robust or sound financial environment and a Central Bank which is transparent, accountable and highly committed to the attainment of the goal of inflation targeting.
- ii. Electric information targeting when a country, for instance pursues information targeting when a country, for instance priorities information targeting along with other

monetary policies objectives in a stable financial environment which, however, is less accountable and transparent.

- iii. Information targeting life, low profile forms of inflation targeting pursued by countries, largely due to lack of strong or credible macroeconomic environment.

Tufar (2002) is of the opinion that inflation targeting is the existence of a stable and predictable relationship between monetary policy instruments and inflation. According to him, in developing countries, it is observed that this condition is difficult to fulfill due to the use of Seigniorage revenues as an important framework of financing public debts, coupled with the lack of commitment to low inflation as a primary goal by monetary authorities and lack of substantial operational independence of the Central Banks.

The term economic growth is related to a quantitative increase in a country's per capita output or income accompanied by expansion in its labour force, consumption, capital and volume of trade. On the other hand, economic development is a broader concept than economic growth. Growth is generally necessary, though not sufficient for achieving development. We may conclude that development in both a physical reality and a state of mind in which society has, through some combination of social, economic, and institutional processes, secured the means for obtaining a better life. Development in all societies must have at least the following three objectives, (Todaro and Smith, 2011): to increase the availability and widen the distribution of basic life-sustaining goods such as food, shelter, health and protection, to raise levels of living, including in addition to higher incomes, the provisions of more jobs, better education, and greater attention to cultural and human values, of all which will serve not only to enhance material well-being but also to generate greater individual and national self-esteem. And, to expand the range of economic and social choices available to individuals and nations by freeing them from servitude and dependence not only in relation to other people and nation-state but also to the forces of ignorance and human misery.

Empirical Literature Review

Sekine (2001) attempted a structural model-based forecast for Japan with a view to deriving a structural inflation function as an equilibrium correction model. The study found excess money and output gap as the major determinant of inflation process in its construction of a one-year inflation forecast for the economy.

Barden et al (2003) constructed an inflation targeting econometric model for Norway at the time the country was transmitting from exchange rate targeting to inflation. Using a smaller simultaneous model of wage and price setting along with marginal models of the rest of the economy, they found that inflation can be affected by changing the short-term interest rate and that the main channels of transmissions are through the output gap and unemployment levels, while interest rate can be used to offset shocks to GDP output. In a similar study, Lopes (2003) investigated the efficient policy rule for inflation targeting in the Colombian economy. Using stochastic simulations of the macroeconomic model of the Colombian economy, the results showed that output variability in the Taylor's rule was lower than the inflation forecast based rule while inflation and instrument variability were very high.

In the study conducted by Ye and Lin (2008) on the effort of inflation targeting in thirteen developing countries from the period 1986 to 2006, using variety of propensity score matching methods, their results showed that on the average, inflation has large and significant effects of lowering both inflation and inflation variability in these thirteen countries.

Bassey and Essien (2014) critically analyzed the basic issues, problems and prospects germane to the adoption of the inflation targeting as a monetary policy framework in Nigeria. Employing descriptive technique of analysis, the study concluded that inflation targeting is not a cure-all medicine and that it may not significantly reduce the real costs of disinflation in Nigeria in terms of a decline in output and an increase in unemployment. The study therefore, recommended that the extent of the success of inflation targeting, if and when adopted, will crucially depend on the availability of executive capacity, quality and timely data and the political will and commitment to the success of the programme on the part of monetary authorities.

Riti and Kamah (2015) examined the achievement of sustainable growth in Nigeria from the period 1970 to 2013 through inflation target using the vector autoregressive (VAR) approach. The empirical results show that in the VAR model, exchange rate contributes significantly to inflationary pressure in Nigeria, which is a reflection of the import dependent nature of the economy.

Odiro (2015) examined inflation targeting in developing countries, using Nigeria as a case study. Employing the vector autoregressive (VAR) approach, between the periods 1970 to 2010, the results show that, money supply and past level of inflation have the potentials of causing significant changes in inflation in Nigeria. The study suggested that more policy attention should be given these variables in order to have stable inflation rate in Nigeria.

Audu and Amaegbesi (2013) evaluated the impact of exchange rate fluctuation on inflation targeting on the Nigeria economy, adopting annual times series data spanning a period of 43 years, 1970 to 2012. The findings of the study suggest that all the variables (interest rate) and exchange rate were statically significant. The study therefore recommends that in order to curb inflation through inflation targeting, efforts must be made towards gathering financial data at a more precise level.

Akuns et al (2016) explored the continued relevance of inflation targeting in an imperative growth focused monetary policy, using Nigerian data for the period 1990 to 2014 and employing VAR model based on the new Keynesian theory to simulate the estimated outcomes for the economy on key macroeconomic variables under two alternative policy framework. The result show that full-fledged inflation targeting may not be relevant as it would not adequately address exchange rate variability, economic growth as well as employment objectives of the Nigerian economy.

Summarily, the first aspect of the literature is the theoretical literature which is on economic growth. Basically, the fundamentals of the growth theory are the (Solow model, 1956). Conceptually, the definitions of inflation, inflation targeting and economic growth was considered. This was followed by the empirical literature. One outstanding observation is that the effect of inflation targeting on the economy varies. For instance, while some mostly from the developed economies agreed that inflation targeting has significant impact on the economy others mostly developing countries (Nigeria) argues that the extent of the success of inflation targeting when adopted will depend on the availability of executive capacity, quality and timely data and the political will and commitment to the success of the programme on the part of the monetary authority. However, conflicting results abounds from the empirical literature. The gap created by the conflicting results is what the present study intends to fill through the use of trend analysis approach, a visualize approach to inflation targeting and economic growth relationship in Nigeria.

Methodology

Analytical Framework

The pioneer work of Phillips (1958) on the relationship between unemployment and the rate of change of money wage rate provided the foundation on which theories of inflation has been developed. Inflation targeting has been characterized as the assignment of an objective function of the following form, which illustrates the trade-off between inflation and output variability (Walsh, 2003; Svensson, 2000).

$$L_t = E_t \sum_{t=0}^{\infty} \beta^i [(\pi_t + i - \pi^T)^2 + \lambda(y - y^*)^2_{t+1}] = 1$$

The function, L , to be minimized reflects expected deviations of inflation (π) from the inflation target (π^T) and the expected deviation of output (y) from potential output (y^*) (the output gap). The greater the deviation from the inflation target, the more costly it will be and the more strongly monetary policy is likely to react, λ represents the weight assigned to achieving the output gap objective relative to the inflation objective. If output = 0, then one has a "strict" inflation targeted, where all weight is put on the inflation objective and there one would expect increased output variability. Any weight on output (>0) describes what is referred to as a flexible inflation – targeting regime. Specifically, in order to plan monetary policy and to measure its success, an objective function is used that accounts for the rate of inflation and economic output.

$F(U^*, Y^*) = [(\mu_t + 1 - \mu^*)^2 + \lambda(y_{t-1} - y^*)^2]$, U^* describes the targeted rate of inflation, μ_{t-1} the achieved rate of inflation in one year. Monetary policy's effects are time-shifted, the real effects are perceived later, that is why the rate of inflation in one year is of importance. The same way y_{t+1} is the economic output in one year whereas y^* is the targeted economic output, λ has a specific meaning: If it is equal to 0 then economic output does not matter to monetary policy, but if it is larger than 0, then economic output matters. The value of λ describes how far the economic output matters relative to the rate of inflation. The two cases can be distinguished as follows: $\lambda = 0$, strict inflation targeting; $\lambda > 0$, flexible inflation targeting.

Data and Method of Analysis

The method of analysis employed in the analysis is the descriptive approach, involving descriptive statistics and trends (tables and charts). The choice of this approach is to descriptively examine the inflation targeting-economic growth nexus in Nigeria, in which other studies have employed the econometric approach. The approach is less prone to measurement errors and omission of variables always encountered in econometric analysis. The advantage of this approach is that it is devoid of econometric modeling mostly associated with misspecification problems. Again, empirical studies in the Nigerian context are faced with the critical issue data unreliability. Although, it may be argued that the descriptive approach may not reflect the true structure of the Nigerian economy. All the same, it is a preliminary analysis that must be taken with caution. The data used for the study is purely secondary in nature and it is sourced from the Central Bank of Nigeria statistical Bulletin of various issues. Some published works on inflation target were also consulted.

Data Analysis**Descriptive Statistics**

The table below shows that the growth rate (log value) of inflation(INF), broad money supply(MS), external reserve(EXRS) and Government fiscal balance(GFB) are 2.81 per cent, 11.7 per cent, and -7.8 per cent respectively. Of all these variables, only government fiscal balance has its minimum value to be negative with -14.1 per cent. Thus, it depicts the unproductive nature of government fiscal position and policy in Nigeria. Meanwhile, the growth rate of economic growth, using RGDP as proxy indicate a mean value of 12.0 per cent

Table 1

Descriptive Statistics

	RGDP	INF	MS	EXRS	GFB
Mean	11.98239	2.810361	11.70192	8.378172	-7.798117
Maximum	13.81527	3.586016	16.51291	10.97632	10.37503
Minimum	8.347353	1.791759	6.67147473	4.757333	-14.07468
Std. Deviation	1.536448	0.434471	3.007424	1.557684	6.451105
Skewness	-1.132917	-0.363997	0.047457	-0.315277	1.622100
Kurtosis	3.186364	2.053317	1.825739	2.544480	0.869537
Jarque-Bera	9.476023	2.614670	2.544480	0.869537	23.53614
Probability	0.008756	0.270540	0.280203	0.647415	0.000008
Observation	44	44	44	44	44

Source: Author's Computation using E-View 9.0

In addition, the standard deviation reports the rate at which these variables deviate from their individual mean values. Government fiscal balance has high deviation from its average value. Similarly, real gross domestic product, inflation rate and external reserve are all negatively skewed to the left, while money supply and government fiscal balance skewed to the right. The 3.0 value of the Kurtosis suggest that the normal distribution of these indicators and variables. The table once again implies that none of the variables are normally distributed. Nonetheless, two of the variables are leptokurtic in nature while the remaining three are platykurtic. The JarqueBera statistic revealed that two variables are significant at 0.05 critical values while the other three are not. Government fiscal balance has the highest JarqueBera value with the value of 23.54. Table 2 provides evidence of selected macroeconomic indicators in the inflation targeting countries (Annual average of 5 years to adoption of inflation targeting and after adoption)

Table 2

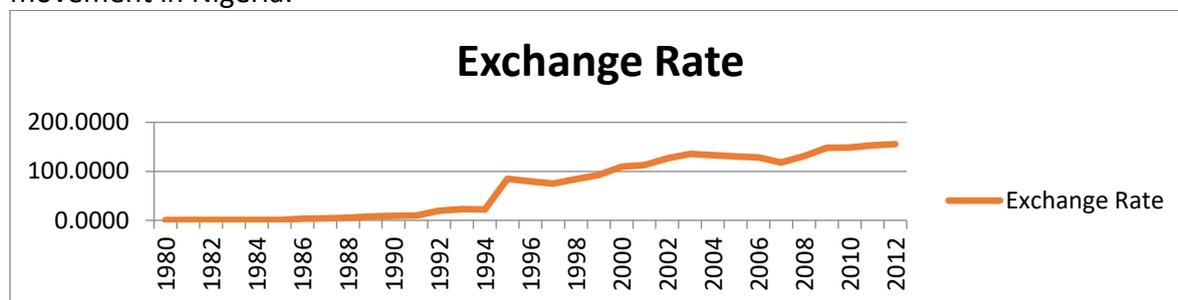
Selected Macroeconomic Indicators in Inflation Targeting adopted Countries

Countries	Growth Rate		Unemployment Rate		Inflation Rate		ExchangeR		
	Before	After	Before	After	Before	After	Before	After	
New Zealand	2.7	3.0	4.2	6.9	11.6	2.2	-7.6	-0.	
Canada		2.9	2.8	8.4	8.7	4.5	2.1	-7.5	-
7.1									
United Kingdom	2.2	2.7	7.4	5.2		6.4	2.6	-2.4	-
2.2									
Sweden	0.8	2.7	2.8	6.1		6.9	1.5	-8.5	-
1.2									
Australia	2.2	3.9	8.6	7.3		4.2	2.5	-6.9	-1.1
Israel	5.8	3.1	8.5	9.4		11.3	3.1	-4.2	
0.9									
Czech.Rep.	4.5	3.2	4.0	8.9		9.1	3.1	-6.6	-
6.2									
Poland	7.9	3.7	14.3	16.7		24.1	4.7	-4.5	-
4.8									
Brazil	3.2	2.3	7.0	9.8		19.2	7.9	-48.0	
5.5									
Colombia	3.3	2.3	11.1	15.8		20.4	7.5	-9.5	
0.5									
Mexico	1.7	4.8	2.7	1.9		24.5	7.2	2.8	-4.6
South Africa	2.6	3.8	Na	27.7		7.3	5.1	4.3	-
2.5									
Switzerland	1.4	1.7	4.1	3.1		0.8	1.0	1.6	-
3.7									
Thailand	1.5	1.7	1.9	2.4		5.1	2.2	4.5	-
1.0									
Korea	4.6	4.3	4.4	3.7		4.0	3.3	6.0	-
5.0									
Hungary	4.2	4.2	8.0	6.1		15.2	5.9	2	-
12.4									
Peru	2.0	5.2	7.8	10.2		5.0	1.9	-1.6	
1.4									
Philippines	3.1	5.1	10.2	11.5		6.3	5.0	8.5	-
3.0									
Indonesia	4.6	5.6	6.5	10.3		8.0	15.5	6.2	-
1.9									
Turkey	4.5	78	9.9	10.4		28.3	10.5	-6.3	-
1.2									

Source: Epsteein and Yeldan (2008); Bassey and Essient (2014).

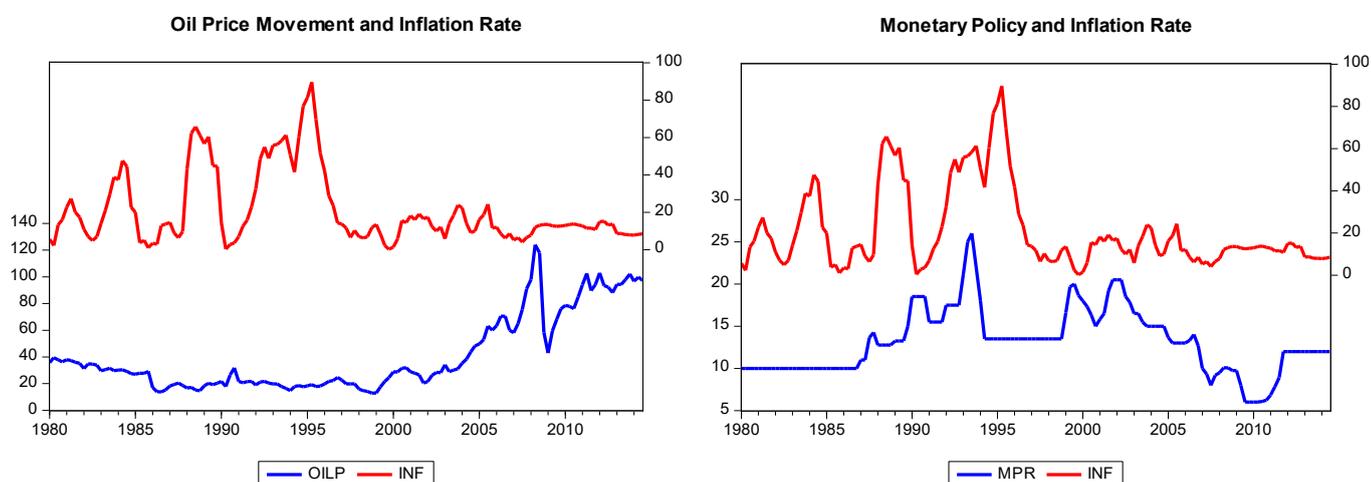
From table 2, it is seen that one third of countries surveyed showed decline in their growth rate after the adoption of inflation targeting, while others showed no major shift on their growth rates. Table 2 shows a significant reduction in the post inflation targeting period in almost all the countries except Indonesia and Switzerland. Looking at the real exchange rate

movement, the table shows a general tendency towards appreciated currencies on the aftermath of the adoption of inflation. Sources have shown that the currencies that appreciated is due to increased expansion of foreign capital inflows arising from global financial glut (Epstein and Yaldan, 2008). The figure 1 below shows the trend of exchange rate movement in Nigeria.



Source: Author's Plot

Fig. 2: Trends in Inflation Rate and Oil Price and Monetary Policy Rate



The figure 2 below shows the trend in exchange rate as it relates to oil price and monetary policy rate-MPR. It is observed that the movement between oil price and exchange rate appears to give a mixed result. It appears negative before 1999, where exchange rate depreciates (rises) as oil price falls. But from beyond 1999 they both appear to flow in similar direction; oil price rises and exchange rate depreciates (rises). Meanwhile, on the side of the exchange rate relation with MPR, the relationship is also mixed. It appears positive before 1999 and negative after 1999. Figure 3 shows the trend between oil price and Government revenue, and MPR. The stylized fact on the relationship between oil price and the Nigeria's government revenue is that oil revenue contributes not less than 85 per cent to the total government revenue. So, it would not be surprising to see oil price moving in parallel with the Nigeria's government revenue. Whereas, on the other side of the graph, MPR appears not to affect government revenue between 1980 and 2002; but beyond 2002, negative relationship is observed, suggesting that reducing MPR may likely lead to higher government revenue.

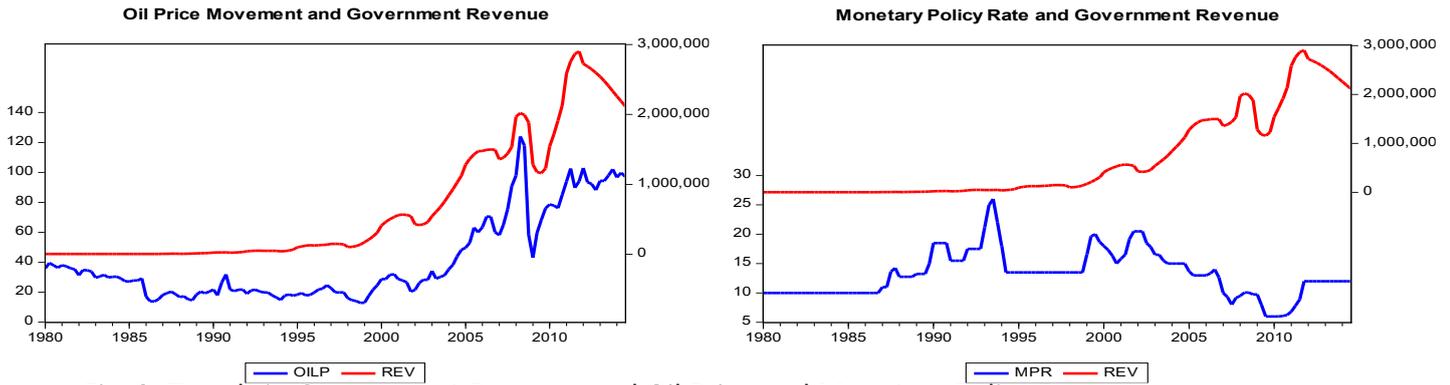
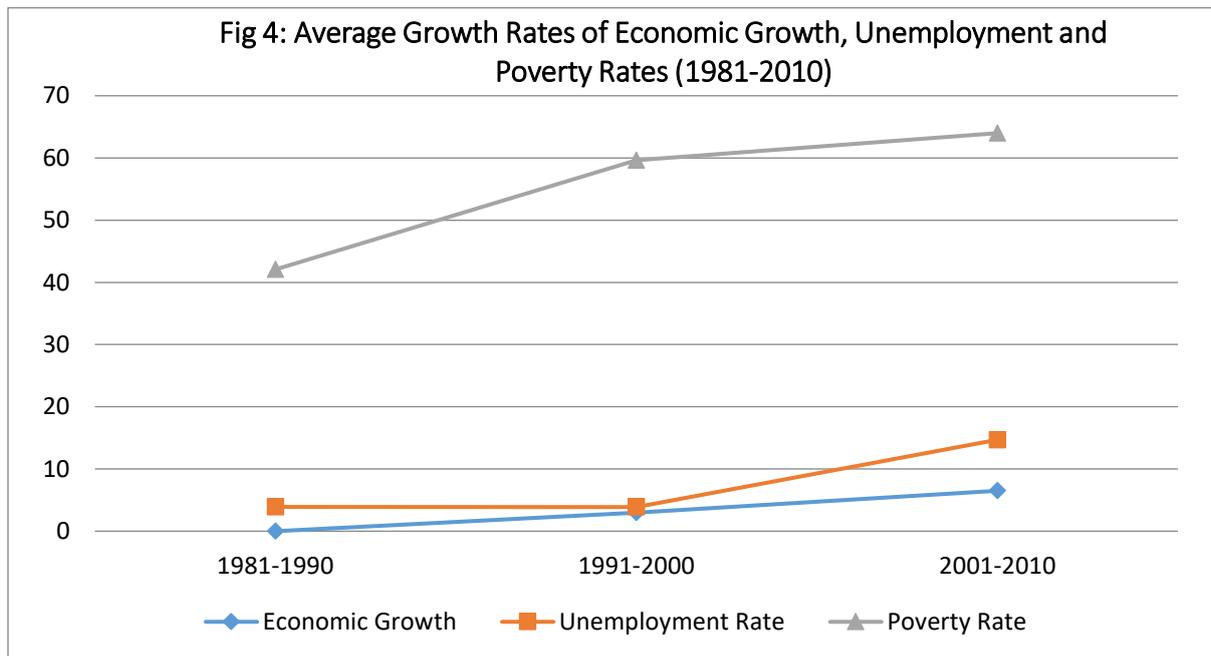


Fig. 3: Trends in Government Revenue and Oil Price and Monetary Policy Rate

Source: Author’s Plot

Figure 4 and Table 2 shown below, depicts that over the past three dates (1981 to 2010), the Nigerian economy grew from an average growth rate of 0% between 1981 and 1990 to 3% between the period of 1991 to 2000 and further to 6.5% between 2001 and 2010. Disappointedly, the average growth of the aggregate economy was accompanied by increased in the average growth of unemployment and poverty rates from 3.93% and 42.07% respectively between 1981 to 1990 to an alarming rate of 14.7% and 63.99% respectively between 2001 and 2010. Also, within this period the disparity in income distribution (measured by Gini Index) rose from 34.18 in 1980 to 42.9 in 2004 and further to 48.8 in 2013 (World Bank Indicators, 2013).



Source: Adapted from Nwosa(2015)

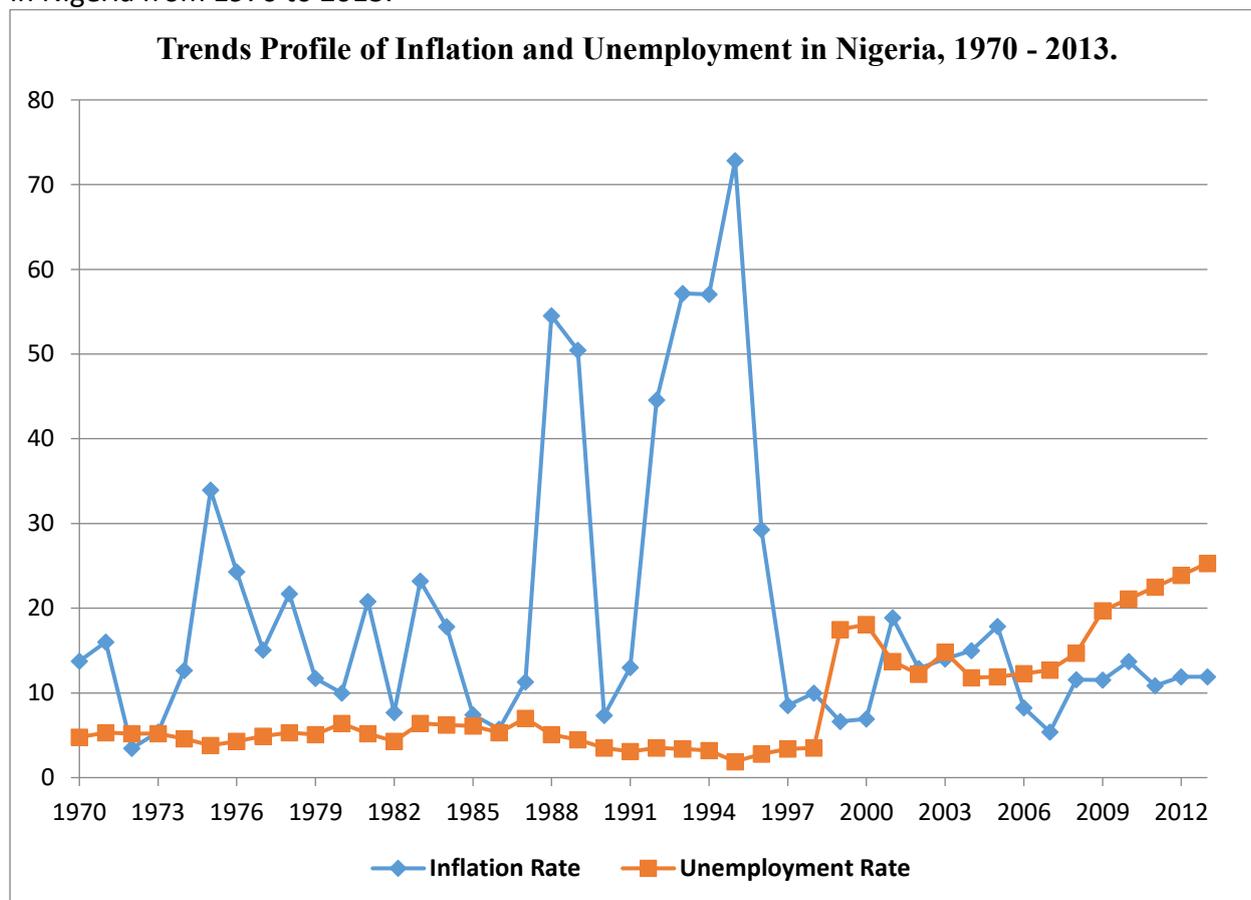
Table 2

Average Growth Rates of Economic Growth, Unemployment and Poverty (1981 to 2010)

Years	Economic Growth	Unemployment Rate	Poverty Rate
1981-1990	0	3.93	42.07
1991-2000	3	3.88	59.65
2001-2010	6.5	14.7	63.99

Source: Adapted from Nwosa (2015)

The rising growth rate and increasing unemployment, poverty and income inequality; clearly demonstrates that growth potential of the economy over the year before the declining growth period has no welfare effect. Figure 5 shows the trend of inflation and unemployment in Nigeria from 1970 to 2013.



Source: CBN Statistical Bulletin, various Issues

Rising rate of unemployment and inflation shows a clear picture of unsatisfactory macroeconomic performance of the Nigerian economy. The national unemployment rate rose from 4.3 percent in 1970 to 6.4 percent in 1980, ten years afterwards. The high rate of unemployment observed in 1980 was attributed to depression in the Nigerian economy during the late 1970s. Specifically, the economic down turn of the period led to the implementation of stabilization measures which included restriction on exports, which caused import dependency of most Nigerian manufacturing enterprise that in turn resulted in operation of many companies operating below their installed capacity. This development led to the closure 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 per cent until 1987 when it rose to 7.1 per cent. However, the Structured Adjustment Programme (SAP) adopted in 1986, had serious implications on employment in Nigeria as unemployment declined from 7.1 per cent in 1987 to as low as 1.8 percent in 1995, after which it rose to 3.4 per cent in 1996 and between 3.4 and 4.7 percentage points in 1996 and 2000. Observation shows that inflation is tending downwards while unemployment is rising upward while recent empirical forecast shows that the rate would continue to increase up to the year 2020 (Orji et al., 2015).

The preceding trends of macroeconomic variables provide answer to the research question which was stated in the form: what is the impact of inflation and economic growth in Nigeria? The relatively high and unstable rate of inflation has imposed a drag on productivity and economic growth in Nigeria. This is specifically so when firms are forced to shift resources away from products and services thereby discouraging investment and retarding growth. High rate of inflation in Nigeria has also eroded the value of fixed nominal payments such as rents, wages, pensions and taxes (Omojimite and Oriavwote, 2012). High rate of inflation have led to shortages of goods in Nigeria and this has caused massive importation of goods into the country. Standard of living has been reduced based on the high and unstable rate of inflation in Nigeria. Inflation may hinder the achievement of macroeconomic objectives such as full employment, rapid and sustained growth and tolerable balance of payments. It may also decrease the purchasing power of money. During a period of inflation, depositors suffer and this has led to a reduction in the tendency to save which affects funds for investment. The impact of inflation on the economy is generally considered to be harmful and suicidal. This explains why the achievement of price stability has always been one of the fundamental objectives of macroeconomic policy in Nigeria.

Conclusion and Recommendations

Summary of Findings

- 1 Majority of the countries sampled prefer target range to point range for inflation target.
- 2 In the majority of the countries, inflation target is set by the Central Bank through monetary Discretion
- 3 With the exception of the United Kingdom, which set inflation target horizon at four years to correspond to its parliamentary tenure, all other countries surveyed maintained target horizon of not more than three years.
- 4 The absence of Nigeria from countries in Africa that have adopted inflation target features is worrisome, South Africa and Ghana are among the countries in Africa that have adopted inflation targeting
- 5 There is a reduction in the post-inflation targeting period in almost all the countries surveyed, with the exception of Indonesia and Switzerland

Conclusion

The study has attempted examining inflation targeting –economic growth nexus in Nigeria, with the aim of drawing experience from cross-country positions, with the aim of imbibing the useful lessons and avoiding the pitfalls. The study employed descriptive approach to the study, these involves tables and charts with data sourced from the Central Bank of Nigeria Statistical Bulletin of various issues. Previous studies on inflation targeting also was consulted to enrich the study. The most salient observation from the study is the absence of Nigeria from the list of countries that have adopted inflation targeting as a prime monetary policy

framework considering the harmful and suicidal effect of inflation on economic growth and investment. From the observations, the followings are recommended:

Recommendations

- 1 Full implementation of inflation target should be a necessary part of monetary policy framework of the Central Bank of Nigeria (CBN).
- 1 The Central Bank of Nigeria should aim at stabilizing fluctuations in money supply in Nigeria in order to reduce inflation and boost confidence and attract investors in the economy.
- 2 Lending rates in Nigeria should be made flexible while appropriate measures be adopted towards raising the value of the naira as this will reduce greatly the inflation rate in the country.
- 3 In order to reduce price and exchange rate instabilities, and increase access to credit the monetary authorities should adopt the inflation target framework.
- 4 Sector-specific policy interventions that will strengthen its productive capacity are needed to deal with inflationary pressures especially as it concerns the peculiarities of the various components of the consumer price index.

References

- Adebiyi, M. A. (2010) Inflation targeting: can we established estate on predictable relationship in Nigeria and Ghana. *Journal of Monetary Economics*.2(1):26-41
- Akuns. J. S., Obioma, E. C., Udoh, E. A. P., Uzonwanne, G. C., Adeleke, A. I., and Mohammed, A. A. (2016) Relevance of Inflation Targeting for developing countries in the New Normal: A case of Nigeria CBN Working Paper Series
- Bassey, G. E., and Essien, E. B. (2014) Inflation targeting framework for monetary policy in Nigeria: Issues, Problems and Prospects. *Journal of Economics and Sustainable Development* 5(12):88-101
- Bernanke, B., Laubach, T., Mishkin, F., and Posen, A. (1999) *Inflation targeting: Lesson from the International Experience*. Princeton, NJ:Princeton University Press
- Central Bank of Nigeria. (2009). Inflation Targeting models for Nigeria, Macroeconomic Modeling Division Research Department, CBN, Nigeria, Abuja. Occasional Paper No. 36
- Debelle, G. (1997). How independent should a Central Bank Be. In: Jeffrey C, Furhereds, Goals, Guidelines and Constraints
- Eichengreen, B. (2001). Can Emerging Markets float? Should they Inflation Target? Banco Central Do Brasil Working Paper Series.
- Epstein, G., and Yeldan, E. (2008). Beyond Inflation Targeting: Assessing the impact and policy alternative :Workshop on monetary policy and inflation target organized by Economic Research Forum, Tunisia.
- Khan, S. M., and Villanueva, D. (1991). Macroeconomic Policies and Long-Term Growth. African Economic Research Consortium
- Lin, S., and Ye, H. (2008). Does Inflation Targeting Really make a difference? Evaluating the treatment effect of Inflation Targeting in seven industrial countries. *Journal of Monetary Economics*, 54:2521-2533.
- Lopez M. (2003). Efficient policy rule for Inflation Targeting in Columbia. Economic Research Department, Central Bank of Columbia
- Odior, E. S. O. (2015). Inflation Targeting in an Emerging Market VAR and Impulse Response Function Approach. *European Scientific Journal* 8(6): 79-98

- Olekah, J. K. A. (2006) Inflation Targeting in Practice: Country Experiences and Lessons for Nigeria In: Proceedings of the 5th Annual Conference of CBN Research and Statistics Department.
- Omojimito, B. U., and Oriavwote, V. E. (2012) Inflation –Growth Nexus: A vector error correction modeling of the Nigerian Economy. *Journal of Alternative Perspective in the Social Sciences*, 4(1):167-187
- Orji, A., Orji, O. I. A., and Okafor, C. J. (2015) Inflation and unemployment nexus in Nigeria: Another test of the Phillip’s Curve. *Asian Economic and Financial Review*5(5): 766-778
- Phillips, A. W. (1958) The Relationship between unemployment and the rate of Change of money wages in the United Kingdom, 1861-1957. *Economica*25, November.
- Pierre, S. (1999) Inflation Targeting and the Yield Curve: New Zealand and Australia Vs the US . Research Paper Series 25, Quantitative Finance Research Centre, University of Technology, Sydney.
- Riti, J. S., and Kamah, M. (2015) Inflation Targeting and economic growth in Nigeria: A vector autoregressive (VAR) Approach.*European Journal of Contemporary Economics and Management*2(1): 42-63
- Sekine, T. (2001) Modeling and Forecasting Inflation in Japan. IMF Working Paper. Policy Review Department
- Solow, R. M. (1956) A contribution to the theory of Economic Growth. *Quarterly Journal of Economics* 70(1): 65-94
- Svesson, L. E. O. (2000) Open-economy inflation targeting. *Journal of International Economics*50:155-183
- Todaro, M. P., and Smith, S. C. (2011) *Economic Development* Eleventh Edition. The George Washington University Addison-Wesley
- Tsenkwo, J. B., and Longduut, D. T. (2010) Inflation Targeting in Nigeria: A VAR Approach. *Jos Journal of Economics*,1(3): 55-69. University of Jos, Nigeria.
- Tufar, E. (2002) Inflation targeting in developing countries and its applicability to the Turkish economy. Virginia Polytechnic Institute and State University
- Walsh, C. E. (2003) Economic Structure and Monetary Policy Design, EWC/EDI Conference on Macroeconomic Implications of Post-Crisis Structural Change.