A Perspective View of Monetary Policy Instrument on the Nigerian Economy
Antony Nkemakolam
Department of Banking, Madonna University, Okija, Nigeria

ABSTRACT
This paper tries to view monetary policy and national economy. Economic growth is simple defined as a positive quantitative increase in the country output of goods and services (Onwukwe 2003). Produced in a country within a specified period of time. Monetary policy is of importance to every developing nation. Every economy strives to achieve sustainable economic growth and development-explained in terms of positive sustainable increase in Gross Domestic Product (GDP) using the OLS Regression Analysis. It was observed that the money supply (m2) contributed positively to the growth of the economy while nominal exchange rate and inflation have a negative impact on GDP which implies that inflation is a constrain to Exchange rate being negative implies that high rate of depression of naira is affecting production capacity especially as most production inputs are being imported and as such the paper recommends amongst others that a Persistent rise in general price level of goods and services must be controlled by the government in order to fight against inflation. This will boost the growth of the economy.

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Introduction
One of the general challenges facing policy makers all over the world is the choice of suitable policy measures capable of achieving the desired sustainable economic growth and price stability. For most countries maintenance of price stability which would lead to sustainable economic growth is one of the over-riding objectives of macro-economic management. The emphasis given to price stability in the conduct of monetary policy is with a view of promoting sustainable growth and development as well as strengthening the purchasing power of the domestic currency among other objectives, monetary policy as a technique of economic management to bring about sustainable economic growth and development has been the pursuit of nations and formal articulation on how money affect economic aggregate. Monetary policy is the process by which the monetary authority of a country controls the supply of money, often targeting an inflation rate or interest rate to influence the level of economic activities (Tom-Ekine 2013).

Monetary policy is a deliberate action of the Central Bank or (the monetary authority) designed to influence the quality of money in the economy. It is the process by which the monetary authority of the country controls the supplies of money often targeting on rate of interest for the purpose of promoting economic growth and stability. Consequently, attempt should be made at an appropriate level to ensure sustainable economic growth and development intact, the aims of monetary policy are basically top control inflation, maintain a healthy balance of payment positions for the country, interest rate in order to safeguard the external value of the national currency and promotion of adequate and sustainable economic growth and development.

In enacting monetary policy in Nigeria, the government tries to achieve some of the following objectives:
• Maintenance of stability in the financial sector
• Increase in economic growth
• Achievement of price stability (single digit inflation)
• Reduction of excess liquidity in the banking sectors etc.

In conjunction with other policy tools, monetary policy enhances the achievement of overall macroeconomic objective of economic growth and development. It is due to this benefit that countries including Nigeria emphasized on monetary policy alongside with other policies as a tool for economic management.

The Paper Problem
Ensuring rapid economic growth is a major macroeconomic goal of every economy. Economic growth is simple defined as a positive quantitative increase in the country output of goods and services (Onwukwe 2003). Produced in a country within a specified period of time.
Monetary policy is of importance to every developing nation. Every economy strives to achieve sustainable economic growth and development—explained in terms of positive sustainable increase in Gross Domestic Product (GDP) for a given period. In this study we intend to look into the extent to which monetary policy instrument influences the Nigerian economy through monetary tools like Money Supply (m), Maximum Lending Rate, Nominal Exchange Rate (NEXR) etc.

Nigerian just like any other developing country has been in serious business to achieve this objective because it is believed that the increase in economic GDP will increase disposable income, stimulate aggregation demand, raise investment and speed up employment opportunity, but despite government’s effort economic performance in the country has been over the years.

There is an implicit belief that Nigeria monetary policy is not making a positive impact on the economy due to underdeveloped financial system in Nigeria. However, the use of monetary tool appears to gain currency immediately after the liberation of the financial system that is, after the introduction of structural Adjustment Programme (SAP) of 1986.

The central Bank of Nigeria (CBN) acting on behalf of the government has executed myriad of monetary policy measures geared towards managing the country monetary policy to achieve macroeconomic objective which seems to have yield little or no result. There is need to know to what extent monetary policy management has impacted on economic growth in Nigeria for the period of 1981-2015, given the fact the monetary policy instrument used to have varied overtime. This is what has prompted our present investigation.

**Statement of Hypothesis**

H₀: There is no significant relationship between economic growth (proxies by GDP) in Nigeria and the selected monetary policy instrument (money supply, maximum lending rate, nominal exchange rate and inflation rate).

H₁: There is significant relationship between economic growth (proxies by GDP) in Nigeria and the selected monetary policy instruments namely money supply, maximum lending rate, nominal exchange rate and inflation rate.

H₂: The planning and implementation of monetary policies has not affected the national income and has not enhanced the production capacity in the Nigeria's Economy. Thai is there is no lag effect.

H₃: The planning and the implementation of monetary policies have affected the national income level and have enhanced the production capacity in the Nigeria's Economy. That is lag effect.

An interest rate or rate of interest is the amount of interest due per period as a proportion of the amount lent, deposited or borrowed (called the principal sum) it is defined as the proportion of the amount loaned which a lender charges as interest to the borrower, normally expressed as an annual percentage.

According to Anyanwu J.C. (1993), interest rate reward for parting with liquidity for a specified period. It is the inverse proportion between a sum of money and what can be obtained for parting with control over the money in exchange for a debt for a stated period of time. Explicitly, according to him, interest rates are the prices paid for the right to borrow and use loanable funds.

The CBN briefs (1998) defined interest rate(s) as "the rental payment with liquidity by lenders". Basically, there are two concept of interest rate. They are as follows:

**Real Interest Rate**

The ideal of real interest rate was developed by Living fisher when he tried to establish the trade-off between consumption today and that in the future. The marginal rate that equilibrates the economic agents, time preference, ability to transform current consumption, and the ability to borrow or lend is called real interest rate.

However, the central bank defines "the real interest rate as the nominal interest adjusted for expected inflation" CBN brief, June, 1995.

**Nominal Interest Rate**

In practice the form of interest rate observed and recorded is the nominal interest rate while it incorporates monetary effects. Nominal interest rate is normally equal to or greater than risk rate. The divergence between the two is effected by inflation, risk taxes, government and institutional investment policy, asset market characteristic and investor preferences and maturity, (Campbell 1982). CBN brief (1995) defines nominal interest rate as the pure rental value paid for the use of money or credit. Nominal interest rate is often expressed as a percentage per annum.

**Money Supply**

It is noted that money is created by the central bank, printing currency notes and coins. Apart from this, money is also created when the banking system increases its loans and overdraft. When a bank for example allows a customer to overdraft his account he is allowed to put more money into use. Thus economists have varying conception of what money supply amounts held in savings deposit and time deposit (mₜ). It argues that even when savings deposit holders cannot issue cheque they can easily go to the bank and withdraw money from their account. Even in the case of fixed deposits which are limited by time agreement, holders a times exercise the option of terminating the fixed deposit by paying some penalties in the form of some interest earnings. Thus we have M2=C + DD + STD where C= Currency in circulation. DD = Demand deposit and STD = savings time deposit. This view is associated with Friedman and monetary economists.

**Determinants of Money Supply**

There are two views about the determinant of money supply. One of them is the government and monetary authority. This determinant exogenously determines money stock in an economy. Here the government through the central bank determines the money supply.

Another view that is the second view is that money supply is determined endogenously by the activities in the economy and interest rate. In this view, money supply (mₜ) is the function interest rate (i). The relationship is positive so that the money supply increases as interest rate increases and vice versa. Here money supply is endogenously determined. The effect of interest rate is overwhelming and money supply rises and falls in the same direction as the interest rate.

Although, which ever determinant we assume, actions of government are to regulate the money supply through appropriate monetary policies as well as fiscal policies.

**Factors Affecting Money Supply**

The factors affecting money supply may include Monetary Base (B) or high power money (H). The monetary base or the high power money is the total of bank reserve(R) plus currency in the hands of the public (C) in other words the
base money or high power money is the total currency in banks reserve plus the currency in circulation with the public. The composition is very important because if a large position of it is in the hands of the public, the less the commercial banks can use it to create money.

**Money Creation**

The extent to which commercial banks can create money is also an important factor because the level will affect the money supply in an economy. The ability however is also subject to control the central bank.

**Banking Habit of the Public**

As people adopt a more positive banking habit by leaving most of their money in bank, the more deposit base commercial bank(s) will have and the money they can create the more money people hold as cash, the more leaking we have and the less money that can be created and the less money supply which affects the economic growth.

**Monetary Policy of the Central Bank**

The monetary policies of the central bank are very important every year. The central bank issues monetary policy guidelines and as the accession demands, policy charges are issued. The central bank sells treasury bills, treasury certificate and how stocks as well as redeeming these instruments. This action goes a long way to influence the level of money supply which determines the economic growth of a country.

**Domestication of Foreign Inward Transfer**

In foreign exchange, proceed that comes into the country and that are not put into domiciliary accounts but converted to local currencies, the money supply will be affected by increasing the level of money stock.

**Measuring the Economic Growth**

Economic growth can be measured using approaches. These includes; nominal, real growth and changes in per capital income. Nominal measurement involves an examination of changes in current price value of aggregate product. Anyanwu and Okhenan (1995) asserted that this measure of growth is based on an evaluation of trend behavior of aggressive expenditure over time.

The author criticized this nominal measurement approach on the basis that increase expenditure is not matched by a concomitant increase in the real value of output within the time frame.

Real growth is one in which the nominal output has been deflated by a price idea to remove the effect of price fluctuation.

Per capital income is also used as measure of growth. Nwikina (1998) defines Per capital income as the gross national product divided by total population GNP.

The shows that the spread of national income over the population. The high the figure obtained the greater the growth of the economy.

**Economic Growth and Development**

Economic growth means an increase in the capacity of an economy to produce goods and services compared from one period of time to another. Economic growth is a process by which a nation's wealth increases over time. The widely use measure of economic growth in a country's total output of goods and services grouped by the gross domestic product (GDP).

The GDP is said to be the measure of a country's overall economic out. It is the market value of all goods and services within the borders of a country. The GDP helps to show the strength of a country's local income.

Economic growth can also be referred to as the increase or per capital income gross domestic product(GDP) or any other measure aggregate income, typically reported to the annual rate or change in the real GDP. Economic growth is primarily driven by improvement in the productivity which involves producing goods and services with the same inputs of labor, capital, energy and materials (Wikipedia).

Economic growth is often used interchangeably with economic development. A distinction can be drawn between them. Anyanwu and Onikham (1995) argue that while growth is concerned with volume of output in the current year, economic development is more embracing. This agrees with Nwikina (2004), that's while economic is concerned with output increase, economic development is multi-dimensional concept. The purpose of development is to improve the welfare of the people.

The structural adjustment program (SAP) promoted by the World Bank and international monetary fund embark upon by the developing countries, Soyode (1990) emphasize that self-sustained growth process requires substantial investible resources, which are readily available at the stock market.

Also, Osinubi (1998), reported that Harry Johnson in 1990 recognized that one of the conditions of being developed pertains to having a large stock of capital per head, which must always be replaces and replenished when used up. When this is leaking, the condition of being under -developed prevails.

**Open Market Operation (OMO)**

This the most flexible and most effective monetary instrument control for solving periodic monetary problems. When there is excess liquidity, they are used to mop up the excesses and also to provide the economy with additional funds in times of deflation. The effects are achieved through the purchase and sale of government securities like treasury bills, treasury certificate, treasury bonds and development stock (Okpara 1994).

When there is an intention to provide liquidity into the economy through the expression of credit (anti-deflationary policy) the CBN purchase government securities which are debt instruments from commercial banks. Commercial banks reserves will then rise by the amount of the securities. In that case, it doesn't mean that the CBN gives commercial banks the cash, what happens is that the reserve account with the CBN is credited with the appropriate requirement which has been met. Any excess is applied to the economy for the purpose of credit expansion (Okpara 1996). If on the other side, a contraction policy is pursued, then the central bank sales government securities to the commercial banks.

**Monetary Policy Rate**

This is the rate at which the central bank as a lender of last resort lends to the banking system. It doesn't directly affect the reserve of the bank. Its direct impact is on the cost of credit. Traditionally, the central bank is pursed to control the volume of credit which it makes available to its banks through its discount windows by fixing the prices at which such credit is made available. The price is expressed in an official minimum rate at which the central bank would re-price what is regarded as eligible bills. If the central bank wishes to increase liquidity and investment, it reduces the discount rate. This in turn reduces the interest rate charged by banks thus resulting in attracting borrowing or low cost of borrowing and hence expansion in the liquidity and investment. On the other hand, if the central bank wishes to
reduce liquidity in the economy, it will raise the discount. This in turn raises the interest rate(s) charge by bank(s) hence lower investment and aggregate demand.

**Cash Reserve Ratio (Special Deposit)**

This is a kind of supportive tool. The ratio is mainly and strictly based on the deposit liability of the banks and it has a reducing effect on the credit-creating capacities of commercial banks. Sometimes, banks are required by law to hold special deposit balances (sometimes non-interest bearing) in the central bank in addition to those which they normally hold as part of their cash reserve base of the commercial banks, thereby, limiting their ability to create credit (Ozoh 1999).

**Selective Control or Guideline**

This is an important monetary policy instrument in Nigeria. It is the instrument of monetary policy used especially to direct credit to the favored and preferred sectors. Thus selective credit control involves administrative orders whereby the central bank, using guidelines instruct banks on the cost and volume of credit to specify the sectors depending on the degree of priority, of the sector. For instance when banks credits are directed to less productive sectors the central bank of Nigeria may impose a ceiling on the bank credit expansion (Ozoh 1999).

**External Monetary Policy**

1. Trade policy
2. Foreign exchange budget
3. Foreign exchange policy
4. External debt management

**Operation of Monetary Policy**

Government seeks to do this in order to ensure that the quantity of money available in the society at any point in time is that which will enable it to manage the economy well (Akpakpan 1994).

On the other hand, monetary policy measures helps in regulating the volume of money in circulation. The application of this policy includes:

1. Sustainable economic growth
2. Domestic and internal stability

Therefore central bank of Nigerian can for example control stock (money) in the country by engaging in an expansionary and contractionary measures, this will depend on the current economic conditions or priority sectors regarding credit direction. Monetary policy also helps to:

1. Combat inflationary pressures and keep it at a low level.
2. Maintain a high stable of employment (full employment)
3. To ensure continuous real economic growth development with stability in all nations
4. To maintain a healthy balance of payment equilibrium
5. Restore stability in the money market and enhance price stability.
6. To maintain a stable exchange rate at an international competition level.

Monetary policy provides a complementary approach to fiscal policy as a means of safeguarding the economy's prospects and stability when the economy is weakening and employment is rising. But when they appears to be excess demand, the resources and manpower of any economy are strained, and the level of price is rising, the federal system to check the growth of money and credit and thereby contract aggregate demand (Silk Z.E).

Increase in money supply affects total spending in the economy directly by putting more funds in the hands of the consumer, business and government agents are directly by reducing interest rates, thereby making it cheaper and more attractive for these economic agent to borrow and then boost their spending on available goods and services on the other side, reduction in the money supply will cause an appreciable drop in total spending both directly by making less money available and indirectly by raising interest rate, which invariably makes money costly and deters consumers, businesses and government from borrowing and spending. This explains the tactical manipulation of the macroeconomic system by monetary authorities (Akpakpan 1994).

If there is idle capacity in the economy, increase in total spending can increase output and employment without putting much upward pressure on the price level but the economy is already at full capacity and there are full unemployed resources around, an increase in total demand will tend to bid up prices. Under some conditions, a cut in the total spending is called for and we would want to reduce the rate of growth of the money supply so that the restraints upon spending would prevent prices from rising.

Further without changing level of output and employment (Silk Z.E).

**Exchange Rate**

This is the rate or price at which one currency exchange for another. Exchange rate according to Olukule (200:5) is a numerical expression of the value of the currency of one country in terms of another country at any given time. He went on further to say 'it can simply be defined as the price of one currency in terms of another currency’. The objective of the exchange rate includes:

1. To promote as much smoothness or as little jerkiness as possible for those exchange adjustment that take place in the sense of avoiding large forced movement in the market rates.
2. To promote minimum friction in the implementation of exchange adjustment by the action of national and international authority.
3. To avoid large divergences of exchange rates from long term equilibrium rates.

**Factors Affecting Exchange Rate**

A lot of factors are known to affect exchange rates. The business environmental factors can be classified into two:

1. **Quantitative Factors**
   These are those that have monetary implications. That is to say their effect can be measured in terms of money. The factors includes: relative price movement, interest rates, balance of payment and demand and supply.

2. **Qualitative Factors**
   They refer to those factors whose effect cannot be measured in terms of money. Some other factors that can affect exchange rates may include: national expenditure, national hazard, population and technology.

**Leads and Lags**

This is the process of accelerating (leads) or slowing down (lags) foreign exchange payments and or receipts when change in exchange rate is anticipated in this situation a Nigeria debtor importers would quicken payments if he force importers to quicken payments if he foresaw a fall in value, he would delay action to enable him utilize little quantity of naira.

**Problems of Lags on Decision Making**

The delay in formulation policy decision enhances its effectiveness. One of the variables responsible for this is political inference (Silk Z.E).
Problems of Lags in Affecting the Economy

These boarders on the transmission mechanism of the policy instruments. There is always a pronounced lag before it affects the economy. For instance, once the central bank has to resolved to stimulate the economy to buy securities and bonds in the open market it is assumed that bank reserves will rise also most instantly but there is a pronounced lag before the complete process of the multiple expansion of changing accounts may work its way through the economy to increase consumer and business demand in the market (Okofie 1981).

The Problem of Information Lag and Forecasting

An urgent recruitment for economy policy making is timely and accurate information on where the economy is, and where it appears to be heading. Economic prediction is still an imperfect art, although economists are hard at work to provide it and indeed it can never be as sure as prediction in the physical sciences. Therefore, economic policy making must always be done with considerable uncertainty about the future (Okowu 1995).

The overall goodness of fit is measured by coefficient of determination ($R^2$) and the f-statistics shows the level of aggregate significance suggesting that the variable collectively is statistically important in explaining the changes in the dependent variable (GDP) through the impact of the explanatory variables.

**Data Presentation**

$\ln Y = a_0 + \beta_1 \ln M2 + \beta_2 \ln FXR + \beta_3 \ln MLR + \beta_4 \ln INF + \mu$

Where

- $Y =$ Gross Domestic Product
- $M2 =$ Money Supply
- $FXR =$ Nominal Exchange rate
- $MLR =$ Maximum lending rate
- $INF =$ Inflation rate

$\ln =$ natural log of the variable
- $\mu =$ error terms

**Result of Regression Analyses**

**Descriptive statistics**

Table 2 presents the long run OLS regression estimation with variables measures at level

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- Skewness       | 0.136428| -0.009806     |
- Kurtosis        | 1.730693| 1.617982      |

**Table 1. This presents data for macro-economic variables used for the study**

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Table 3 shows the summary of empirical result of the level services OLS multiple regression.

| Jarque-Bera | 2.458152 | 2.785939 | 4.740450 | 0.064741 | 16.36459 |
| Probability | 0.292563 | 0.248337 | 0.093460 | 0.968148 | 0.000280 |
| Sum         | 282.0400 | 218.9000 | 2363.670 | 742.2000 | 708.1900 |
| Sum Sq. Dev.| 177.5429 | 202.2227 | 61705.05 | 1165.873 | 12284.86 |
| Observations| 35        | 35        | 35        | 35        | 35        |

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<th>t-Statistic</th>
<th>Prob.</th>
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Source: E- view Econometric Computer Software Application Version 6

OLS Regression Analysis
Dependent Variable: L N Y
Method: Least Squares
Date: 01/11/17 Time: 12:41
Sample: 1981 2015
Included observations: 35

Analysis of DATA
With reference to the Ordering Least Square (OLS) multiple regression, estimated result of the above model as shown in table 4.2, the R-square shows that 99% of the variations in GDP (economic growth) are explained by the aggregate changes in the monetary policy instruments used for the study, this shows a high explanatory power.

The t-statistics which is 901.28 with zero probability is also good, indicating that the selected explanatory variables are in aggregate very important in explaining changes or variations in economic growth in Nigeria. This implies that these explanatory variables such as money supply (m₁), Nominal Exchange Rate (FXR), Maximum Lending Rate (MLR) and Inflation (INF) are all important variables in explaining changes or variations in economic growth. It was observed that the money supply (m₁) contributed positively to the growth of the economy while nominal exchange rate and inflation have a negative impact on GDP which implies that inflation is a constrain. Exchange rate being negative implies that high rate of depression of naira is affecting production capacity especially as most production inputs are being imported.

However, it should be noted that only money supply and nominal exchange rate are significant with the T-statistic probabilities of 0.0000 and 0.0136, respectively.

Conclusion
Based on the study and findings on the impact of monetary policy instruments on economic growth in Nigeria for the period of 1981-2015, apparently the study reveals that monetary policy could impact on economic growth via the monetary policy indices selected for this study and they are in aggregate capable of influencing the economic growth of the country. Hence, the monetary policy indices remain the main streams in every economy that has the power to influence or impact significantly on economic growth. Overall there are significant relationships between economic growth in Nigeria and government monetary policies.

Recommendation
The following recommendations are suggested: The government should pay a close attention to the monetary policy instrument in the country as monetary policy is a major process by which monetary authorities of a country control the supply, availability and cost of money which are geared towards attaining oriented objectives to stabilize and increase the growth of the economy. The study therefore recommends as follows; the government as well as the central bank of Nigeria should ensure that the monetary indices are formulated and implemented effectively.

Persistent rise in general price level of goods and services must be controlled by the government in order to fight against inflation. This will boost the growth of the economy. Also the instability in the foreign exchange rate should be controlled since it has a negative impact on GDP, this will encourage foreign direct investment and ultimately, economic growth. Furthermore, from the research work carried out interest rate has a negative impact and that signifies that high rate inhibits growth since it reduces return on investment.

The CBN should increase their examination of banks to ensure that they are policy compliant.

References
www.wikipedia.org/wiki/economicgrowth