

THE CHALLENGES OF MONETARY POLICY TOWARDS NATIONAL DEVELOPMENT: A MARKETING PERSPECTIVE

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Abstract

The study examined monetary Policy as a measure capable of achieving the desired sustainable economic growth and price stability in Nigeria. The study was carried out using primary and secondary methods in the collection of data, where in primary data; the researcher designed and advanced questionnaires. The data collected from the questionnaire was analyzed in tables with simple percentage and interpreted for the understanding of the study. The analysis tool that was used in testing the hypothesis was the chi-square (X^2). After the presentation and analysis carried out, The f-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 (m_2), 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 (m_2) 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. 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, amongst others.

Keywords; Policy Makers, Exchange Rate, Sustainable Economic Growth and Monetary Indices

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 ensure price stability and general trust in the currency.

Monetary policy according to Central Bank of Nigeria (CBN 1992) refers to the combination of measures designed to regulate the values, supply and cost of money in an economy, in consonance with the level of economic activities. It can be described as the act of controlling the direction and movement of monetary and credit facilities, in pursuance of stable prices and economic growth in an economy.

An excess supply of money will result in an excess demand for goods and services which will cause a rise in prices and subsequent deterioration of the balance of payment position through inflationary pressures. On the other hand, an inadequate supply of money could induce stagnation in the economy and thereby retard growth and development. Monetary policy (which includes credit and financial policy) is concerned with the use of changes in money- supply and 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.

This research project will evaluate the economic implications of monetary policy instruments on the Nigerian economy and how these instruments have failed in ameliorating its impact. The outcome will give an insight into problem areas that require further attention, and recommendation necessary to address them.

Statement of the 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_2), 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 not encouraging.

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.

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.
- H₀: 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. That is there is no lag effect.
- H₁: 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.

LITERATURE REVIEW MONETARY POLICY

The origin of monetary policy dates back to the late 19 century it was used to maintain the gold standard. Monetary policy is the process by which a government, central bank or monetary authority of a country uses to control:

- The supply of money
- Availability of money and
- Cost of money or rate of interest to attain a set many objectives oriented towards the growth and stability of the economy.

Monetary policy is contracted with fiscal policy which refers to government borrowing, spending and taxation. It rest on the relationship between the rate of interest in the economy that is the price of which money can be borrowed and the total supply of money. Monetary policy uses a variety of tools to control or to influence outcomes like economic growth, inflation, exchange rates with other currencies and unemployment.

The primary tool of monetary policy is open market operation. This entails managing the quality of money in circulation through the buying and selling of various financial instruments such as treasury bills, company bond or foreign currencies. All of these purchases or sales result in more or less base currency entering or leaving market circulation. Usually the short term goal of open market operation is to achieve a specific short term interest Rate target.

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 affected 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.

INSTRUMENT OF MONETARY POLICY

We have domestic and external monetary policies. Domestic instruments are grouped into two categories:

1. Those of general nature
 2. Those which are selective in nature
- General instruments of monetary policy are:

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 purposed 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-discount 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

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 frictions in the implementation of exchange adjustment by the action of national and international authority.
2. 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.

Problems of Lags in Affecting the Economy

These boards on the transmission mechanism of the policy instruments. There is always a pronounced lag before it affects reaches 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 (Okfie 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).

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 overdraw 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 (m_2). 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 $M_2=C + DD+STD$ 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 economic system and interest rate. In this view, money supply (m_2) 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 effective monetary policies as well as fiscal policies.

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 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 Oakhenan (1995) asserted that this measure of growth is based on an evaluation of tread 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. This 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 is 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 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.

METHOD OF DATA ANALYSIS

The technique adopted was the multiple regression in which the Ordinary Least Square (OLS) method was used to test whether the monetary policy instruments have made an impact on economic growth of Nigeria proxy by Gross Domestic Product (GDP) by determining the type of relationship (positive or negative).

Multiple regression analysis is a regression analysis with two or more variables as independent or explanatory variable and one variable as the dependent variable. The dependent variable GDP is dependent on the changes in the explanatory variables. In this study economic growth (GDP) is dependent variable while the monetary policy instruments are the independent variables.

Ordinary Least Square (OLS) also called the method of least square is a statistical technique that uses simple data to estimate the true relationship between two variables the technique may be applied to single or multiple explanatory variables that have been approximately coded.

The procedure for analyzing the data of this research work was the econometric procedure. The adequacy of the model estimate is based on the coefficient of determination (R^2) which measures the goodness of it. In other words, it measures the percentage of variation in the dependent variable that is explained by the independent variables.

MODEL SPECIFICATION

The model specifies economic growth (proxy by Gross Domestic Product) as a function of selected monetary policy instrument which include (Money Supply (m_2), Nominal Exchange Rate (FXR), Maximum Lending Rate (MLR), Inflation (INF).

Therefore, this study can be mathematically represented in a straight line form. The model for the analysis is expressed by the following equation; $Y = f (M_2, FXR, M2R, Inf, \mu)$. . . (1)

The equation indicates that the equation is a linear one where;

Y = Gross Domestic Product (GDP)

M_2 = Money Supply

MLR = Maximum Lending Rate

Inf = Inflation

μ = Error terms

However there are other factors that affect GDP (proxy for economic growth) which are not included in this model. These factors are represented by the end term u. which is error term.

The straight line and mathematical form express it as follows: $Y = a_0 + a_1 x_1 + a_2 x_2$. . . (2)

$Y = a_0 + a_1 m_2 + a_2 FXR + a_3 mlr + a_4 INF + \mu$. . . (3)

Where;

Y =Gross Domestic Product (proxy for economic growth)

M_2 = Money supply

FXR =Nominal exchange rate

MLR =Maximum lending rate (interest rate)

INF = Inflation rate (annual)

μ =error term.

Money Supply (M_2)

Money supply is the currency in circulation, demand deposit and the saving time deposit in a particular country. It is mathematically represented as $m_2 = C+DD+STD$. These view with Friedman and monetary economist.

Nominal Exchange Rate (FXR)

This is the rate or price at which one currency exchanged for another. Exchange rate according to Olukole (2002:5) is a numerical expression of the value of the currency of one country in terms of another country at any given time. Also it can be referred to as the price of one currency in terms of terms of another currency.

Maximum Lending Rate

This is otherwise known as interest rate and it can be defined as the return or yield on equity or opportunity cost of differing current consumption for the future.

The CBN briefs (1998) defined interest rate(s) as "the rental payments for the use of credit by borrowers and return for parting with liquidity by lenders".

Inflation ((INF)

This is the greatest challenge facing most developing countries today. It is regarded as the persistent rising in general price level of all goods and services. It can be defined also as time or a situation when the level of aggregate demand exceeds aggregate supply in the economy. It is a period when we have too much money chasing after few goods and services.

The prior expectation is that Gross Domestic Product (GDP) is expected to be positively related to money supply. This indicates that we expect money supply to increase as GDP increases. GDP is expected to be negatively related to interest rate. This implies that high interest rate will reduce investment and ultimately economic growth of the country.

Inflation is expected to have a negative sign in the long run as it affects demand of goods and also increases interest rate which affects cost of capital. Exchange rate on the other hand is expected to be either negative or positive. A negative sign is to be expected because Nigeria is an import-dependent country and as such cost of importation for manufacturing companies will be high and will adversely affect GDP of the economy.

DATA PRESENTATION

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

S N	D A T E	Y	M 2	F X R	M L R	I N F
1	1 9 8 1	9 4.3 3	1 4 . 4 7	110.39	10. 0 0	1 7 . 4
2	1 9 8 2	101. 01	1 5 . 7 9	109.86	11. 7 5	1 . 9
3	1 9 8 3	110. 06	1 7 . 6 9	109.84	11. 5 0	3 8 . 8
4	1 9 8 4	116. 27	2 0 . 1 1	113.20	13. 0 0	2 2 . 6
5	1 9 8 5	134. 59	2 2 . 3 0	99.90	11. 7 5	1 . 0
6	1 9 8 6	134. 60	2 3 . 8 1	51.89	12. 0 0	1 3 . 7
7	1 9 8 7	193. 13	2 7 . 5 7	14.72	19. 2 0	9 . 7
8	1 9 8 8	263. 29	3 8 . 3 6	12.97	17. 6 0	6 1 . 2
9	1 9 8 9	382. 26	4 5 . 9 0	8.20	24. 6 0	4 4 . 7
1 0	1 9 9 0	472. 65	5 2 . 8 6	7.72	27. 7 0	3 . 6
1 1	1 9 9 1	545. 67	7 5 . 4 0	6.34	20. 8 0	2 3 . 0
1 2	1 9 9 2	875. 34	111. 1 1	3.74	31. 2 0	4 8 . 8
1 3	1 9 9 3	1,089.68	165. 3 4	2.97	36. 0 9	6 1 . 3
1 4	1 9 9 4	1,399.70	230. 2 9	2.96	21. 0 0	7 6 . 8
1 5	1 9 9 5	2,907.36	289. 0 9	0.74	20. 7 9	5 1 . 6
1 6	1 9 9 6	4,032.30	345. 8 5	30 . 1 7	20. 8 6	1 4 . 3
1 7	1 9 9 7	4,189.25	413. 2 8	28 . 8 3	23. 3 2	1 0 . 2
1 8	1 9 9 8	3,989.45	488. 1 5	28 . 3 2	21. 3 4	1 1 . 9
1 9	1 9 9 9	4,679.21	628. 9 5	73 . 9 1	27. 1 9	0 . 2
2 0	2 0 0 0	6,713.57	878. 4 6	77 . 2 1	21. 5 5	1 4 . 5
2 1	2 0 0 1	6,895.20	1,269.32	81 . 3 0	21. 3 4	1 6 . 5
2 2	2 0 0 2	7,795.76	1,505.96	88 . 9 5	30. 1 9	1 2 . 1
2 3	2 0 0 3	9,913.52	1,952.92	100.63	22. 8 8	2 3 . 8
2 4	2 0 0 4	11,411.07	2,131.82	107.07	20. 8 2	1 0 . 0
2 5	2 0 0 5	14,610.88	2,637.91	106.58	19. 4 9	1 1 . 6
2 6	2 0 0 6	18,564.59	3,797.91	105.02	18. 7 0	8 . 0
2 7	2 0 0 7	20,657.32	5,127.40	106.41	18. 3 6	6 . 6
2 8	2 0 0 8	24,296.33	8,008.20	80 . 0 3	18. 7 0	1 5 . 1
2 9	2 0 0 9	24,794.24	9,411.11	9 6 . 2 1	22. 6 2	1 2 . 1
3 0	2 0 1 0	54,612.26	11,034.94	9 6 . 8 9	22. 5 1	1 1 . 8
3 1	2 0 1 1	62,980.40	12,172.49	101.35	22. 4 2	1 0 . 3
3 2	2 0 1 2	71,713.94	13,895.39	9 8 . 7 2	23. 7 9	1 2 . 0
3 3	2 0 1 3	80,092.56	15,160.29	9 6 . 8 4	24. 6 9	7 . 9 6
3 4	2 0 1 4	89,043.62	17,679.29	9 5 . 7 7	25. 7 4	7 . 9 8
3 5	2 0 1 5	94,144.96	18,901.30	107.34	26. 7 1	9 . 5 8

5. Source: CBN Statistical Bulletin, 2015

$$\ln Y - a_0 + \beta_1 \ln M2 + \beta_2 \text{FXR} + \beta_3 \text{MLR} + \beta_4 \text{INF} + \mu$$

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

μ = error terms

Result of Regression Analyses

Descriptive statistics

	L N Y	L N M 2	F X R	M L R	I N F
M e a n	8.058286	6.254286	67.53343	21.20571	20.23400
Median	8.340000	6.190000	88.95000	21.34000	12.10000
Maximum	11.45000	9.850000	113.2000	36.09000	76.80000
Minimum	4.550000	2.670000	0.740000	10.00000	0.200000
Std. Dev.	2.285137	2.438796	42.60111	5.855800	19.00840
Skewness	-0.136428	-0.009806	-0.521946	0.063784	1.540568

Kurtosis	1.730693	1.617982	1.530006	3.167690	4.314545
Jarque-Bera Probability	2.458152	2.785939	4.740450	0.064741	16.36459
	0.292563	0.248337	0.093460	0.968148	0.000280
S u m	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

Table present the long run OLS regression estimation with variables measures at level.
Table shows the summary of empirical result of the level services OLS multiple regression.

The OLS Regression Analysis

Dependent Variable: L N Y

Method: Least Squares

Sample: 1981 2015

Included observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
L N M 2	0.939751	0.023753	39.56307	0.0000
F X R	-0.003760	0.001434	-2.622269	0.0136
M L R	0.007533	0.009624	0.782743	0.4399
I N F	-0.004094	0.002482	-1.649714	0.1094
C	2.357864	0.217834	10.82411	0.0000
R – s q u a r e d	0.991747	Mean dependent var		8.058286
Adjusted R-squared	0.990647	S.D. dependent var		2.285137
S.E. of regression	0.220999	Akaike info criterion		-0.049755
Sum squared resid	1.465214	Schwarz criterion		0.172437
Log likelihood	5.870718	Hannan-Quinn criter.		0.026946
F – s t a t i s t i c	901.2898	Durbin-Watson stat		0.797300
Prob (F-statistic)	0.00000			

Source: E- view Econometric Computer Software Application Version 6

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 f-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 (m₂), 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 (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. 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.

Based on the relevant findings: the study summarizes as below

Firstly, it was generally established that the selected monetary policy instrument in aggregate have a significant impact on economic growth of Nigeria based on the high goodness of fit represented by the coefficient of determination (R^2) and the f-statistic.

Secondly, it was found from estimated GDP model result that money supply (m_2) is positively related to the growth of the economy in Nigeria. It was also established that Nominal Exchange Rate (FXR) and Inflation (INF) are negatively related to economic growth (GDP) implying that they have a negative impact on the growth of the economy or are constraints to economic growth in Nigeria.

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

In the light of the above findings, 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. he CBN should increase their examination of banks to ensure that they are policy compliant.

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