Monetary Policy Variables and Commercial Banks' Loans: A Causality Approach

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Abstract
This study examined the cause and effect of monetary policy variables on Commercial Banks Loans and Advances in Nigeria for the period 1980-2013. In the model specified, commercial banks loans and advances (LCBLA) is a function of the explanatory variables; broad money supply (LM2), monetary policy rate (MPR), liquidity ratio (LR), inflation rate (IFR) and exchange rate (EXR). It was found that there is a causal relationship between monetary policy variables and commercial banks loans and advances in Nigeria within the period under study. This implies that there existed cause and effect between commercial bank loans and advances and the monetary policy variables. Specifically, money supply proved to be a significant parameter which causes commercial bank loans and advances. Also, causality runs from monetary policy rate to commercial bank loans and advances. On the other hand, commercial bank loans and advanced was found to significantly influence exchange rate. In ECM, disequilibrium of the system was found to be corrected at a speedy rate by 89.2% yearly. It is estimated from the result, 1% increase in money supply will bring about 0.3% increase in commercial bank loans and advances. However, any increase in liquidity ratio, inflation rate and exchange rate, will bring about decrease in the commercial bank loans and advances. In view of the findings, the relevant monetary authorities should apply with caution monetary policy variables to significantly influence the commercial banks loans and advances. Expansionary monetary policy should be adopted by the CBN force down interest rate and increase money supply because a fall in the bank rate will reduce interest on loans made by commercial banks. This will encourage more customers to secure loans from their banks thereby, increasing investment opportunities in the country ceteris paribus.
Keywords: Monetary policy variables, commercial banks loans and advances, granger causality, expansionary monetary policy, ECM

Introduction
Monetary policy, to a great extent, is the management of expectations. Monetary policy rests on the relationship between the rates of interest in an economy, that is, the price at which money can be borrowed, and the total supply of money. Monetary policy uses a variety of tools to control one or both of these, to influence outcomes like economic growth, inflation, exchange rates with other currencies and unemployment. Where currency is under a monopoly of issuance, or where there is a regulated system of issuing currency through banks which are tied to a central bank, the monetary authority has the ability to alter the money supply and thus influence the interest rate (to achieve policy goals). The beginning of monetary policy as such comes from the late 19th century, where it was used to maintain the gold standard.

The important of monetary policy variable on the development and growth of developing economy like Nigeria has attracted a lot of attention in recent year. Developing countries may have problems establishing an effective operating monetary policy. The primary difficulty is that few developing countries have deep markets in government debt. The matter is further complicated by the difficulties in forecasting money demand and fiscal pressure to levy the inflation tax by expanding the monetary base rapidly. In general, the central banks in many developing countries have poor records in managing monetary policy. This is often because the monetary authority in a developing country is not independent of government, so good monetary policies takes a backseat to the political desires of the government or are used to pursue other non-monetary goals. Recent attempts at liberalizing and reforming financial markets (particularly the recapitalization of banks and other financial institutions in Nigeria and elsewhere) are gradually providing the latitude required to implement monetary policy frameworks by the relevant central banks.

Central Bank of Nigeria (CBN) takes a number of monetary policy decisions, including a change in the level of money supply (M2), the Monetary Policy Rate (MPR), or a change in the exchange rate. The central bank defines money supply in two ways: narrow and broad money. Narrow money (M1) is defined to include currency in circulation plus current account deposits with commercial banks. Broad money measures the total volume of money supply in the economy and is defined as narrow money plus savings and time deposits with banks including foreign denominated deposits. There is excess money supply when the amount of money in circulation is higher than the level of total output of the economy. When money supply exceeds the level the economy can efficiently absorb, it dislodges the stability of the price system, leading to inflation or higher prices of goods. In this brief, we shall examine the cause and effect of the money supply by the CBN affects commercial bank loans. When the CBN changes the level of money supply, it does so through the control of the

base money. Base money is made up of currency and coins outside the banking system plus the deposits of banks with the central bank. If the central bank perceives that there is too much money in circulation and prices are rising (or there is potential pressure for prices to rise), it may reduce money supply by reducing the base money. To reduce the base money, the central bank sells financial securities to banks and the non-bank public so as to reduce the ability of deposit money banks to create new money. The central bank can reduce the money supply by also raising the cash reserve deposits that banks are required to hold with the central bank. The larger the deposit balances on bank balance sheets, the higher their ability to create more money and to give loans. Central bank monetary policy, therefore, targets the growth in those deposit balances so as to control the expansion in money supply which could precipitate price distortions.

A solid and stable financial sector is essential to make a well functioning national economy and to ensure balance liquidity within the economy. Appropriate liquidity management is essential to foster economic growth. Though, to achieve economic stability proper the uses of fiscal and monetary policies are required. Despite establishing regulatory agencies and monetary policy committees, Nigerian banks have actually been deterred in creating adequate liquidity and additional credit for the sustenance of the entire sector by manipulating these instruments, central banks affect the rate of growth of the money supply, the level of interest rate, security prices, credit availability and liquidity creation from the and of commercial bank. These factors, in turn can exert monetary imbalances or shocks on the economy by influencing the level of investment, consumption, imports, exports, government spending, total output, income and price level in the economy.

Monetary policy is a major economic stabilization weapon, which involves measure designed to regulate and control the volume, cost, availability and direction of money and credit in an economy to achieve some specified macro-economic policy objectives. That is, it is a deliberate effort by the Central Bank to control the money supply and credit conditions for the purpose of achieving certain broad economic objectives.

Commercial banks are the most important savings, mobilization and financial resource allocation institutions. Consequently, these roles make them an important phenomenon in economic growth and development. In performing this role, it must be realized that banks have the potential, scope and prospects for mobilizing financial resources and allocating them to productive investments. Therefore, no matter the sources of the generation of income or the economic policies of the country, commercial banks would be interested in giving out loans and advances to their numerous customers bearing in mind, the three principles guiding their operations which are, profitability, liquidity and solvency. However, commercial banks decisions to lend out loans are influenced by a lot of factors such as the prevailing interest rate, the volume of deposits, the level of their domestic and foreign investment, banks liquidity ratio, prestige and public recognition to mention a few.

Monetary policy uses three main tactical approaches to maintain monetary stability:

- **Money supply.** The first tactic manages the money supply. This mainly involves buying government bonds (expanding the money supply) or selling them (contracting the money supply). When the central bank disburses or collects payment for these bonds, it alters the amount of money in the economy while simultaneously affecting the price (and thereby the yield) of short-term government bonds. The change in the amount of money in the economy in turn affects interbank interest rates.

- **Money demand.** The second tactic manages money demand. Demand for money, like demand for most things, is sensitive to price. For money, the price is the interest rates charged to borrowers. Setting banking-system lending or interest rates (such as the overnight bank lending rate, the federal funds discount Rate, and the London Interbank Offer Rate, or Libor) in order to manage money demand is a major tool used by central banks. Ordinarily, a central bank conducts monetary policy by raising or lowering its interest rate target for the interbank interest rate. If the nominal interest rate is at or very near zero, the central bank cannot lower it further. Such a situation, called a <u>liquidity trap</u>, can occur, for example, during deflation or when inflation is very low

- **Banking risk.** The third tactic involves managing risk within the banking system. Banking systems use fractional reserve banking to encourage the use of money for investment and expanding economic activity. Banks must keep banking reserves on hand to handle actual cash needs, but they can lend an amount equal to several times their actual reserves. The money lent out by banks increases the money supply, and too much money (whether lent or printed) will lead to inflation. Central banks manage systemic risks by maintaining a balance between expansionary economic activity through bank lending and control of inflation through reserve requirements.

These three approaches—open-market activities, setting banking-system lending or interest rates, and setting banking-system reserve requirements to manage systemic risk—are the "normal" methods used by central banks to ensure an adequate money supply to sustain and expand an economy and to manage or limit the effects of recessions and inflation. These "standard" supply, demand, and risk management tools keep market interest rates and inflation at specified target values by balancing the banking system's supply of money against the demands of the aggregate market.

Monetary policy in Nigeria over years has been the combination of measure taken by this monetary

authority to influence directly or indirectly or both, the supply of money and credit to the economy and the structure of interest rates with a view to achieving a sustainable rate of economic growth, price stability and balance of payment equilibrium. Although monetary policy has been conducted under wide ranging economic environments, the strategy has remained the same. However, the relevant target monetary policy has change following rapid institution changes in the financial environment.

In the lights of this, the assessment of the bank system (particularly in the area of loans and Advances) can be evaluated through the performance of monetary policy variables; these variables affect the performance of the bank in giving loans to the public.

By and large, the main purpose of this research work is to examine the cause and effect of monetary policy variables on Commercial Banks Loans and Advances in Nigeria.

Literature Review

Monetary policy influence the performance of the economy's crucial factors such as output, inflation and Commercial Bank Loans and also prices of goods, exchange rate, consumption rate, asset prices and investment decisions. Nevertheless, the Central Bank of Nigeria cannot directly control inflation or influence output and commercial bank loan directly, it affects them indirectly by raising or lowering a short-term interest rate or by changing the money supply through an open market operations, purchasing other securities – government bonds, to increase the money supply or selling securities to decrease it (Folawewo and Osinubi, 2008).

There are many documented empirical literatures on the effect of monetary policy variables and commercial bank loans using different econometrics tools. However, some of the well known studies are the ones which incorporated various monetary tools in analyzing the effect of monetary policy variables on banks' lending and activities. Some of these studies are reviewed in these sections;

Ajayi & Atanda 2012 conducted a research on Monetary Policy and Bank Performance in Nigeria: The Engle-granger two step cointegration approach was adopted based on the regression model that regress banks total loan and advances on minimum policy rate, cash reserves ratio, liquidity ratio, inflation and exchange rate, they find out that monetary policy instruments are not effective to stimulate credit in the long-run, while banks total credit is more responsive to cash reserve ratio. Then, it is proffered that the monetary authority should moderate the minimum policy rate as a tool for regulating commercial banks operations and facilitating investment in the economy.

Philips, Mbanasor & Osuala (2012) examined the influence of monetary policy variables on banks' credit supply to small and medium scale enterprises (SMEs) in Nigeria. Time series data which were collected on quarterly basis were elicited from the Central Bank of Nigeria (CBN) Statistical bulletin and financial statements for five commercial banks. The data covered a period of 1995-2010 and were analyzed using Fully Modified Least Squares (FMOLS). Considering the time series properties of the variables, unit root test was done with Philips Perron test to establish stationarity prior to actual analysis. The result of the FMOLS indicated that policies on interest rate and liquidity ratio were negatively and positively significant at 1 percent probability level respectively. Based on the results, it was recommended that government through CBN should strengthen existing policies on the adjustment of interest rates and liquidity ratio so as to increase and stabilize credit supply to SMEs.

Anyawu and Kalu (2014) carried out a study to ascertain the impact of CBN money supply on the growth of Nigeria economy, ascertain the extent of correlation that exists between money supply and output. The findings shows that change in money supply (M2) has significant effect on variables such as CBLA and output in Nigerian economy within the period under review, Also there is a significant strong multiple correlation among Real GDP, Money supply and Commercial Banks' loans and Advances (R= 95.1%). The coefficient of Determination (R2) reveals that 90.5% of variations in RGDP were explained by our selected explanatory variables (Money supply and Commercial Banks' loans and Advances).

Younus and Akhta (2009) examined the significance of Statutory Liquidity Requirement (SLR) as a monetary policy instrument in Bangladesh. Using descriptive analysis techniques like trend analysis and summary statistics, they found that statutory liquidity requirement has experienced infrequent changes and past evidence has shown that reduction in SLR produced positive impact on bank credit and investment especially prior to the 1990s. SLR and Cash Reserve Requirement (CRR) were found to be significant tools of reducing inflation and both for scheduled banks are used only in situation of drastic Imbalance-resulting from major shocks. They posited that Bangladesh Bank has used open market operations (OMOs), more frequently rather than changes in the Bank rate and SLR as instruments of monetary policy in line with its market oriented approach.

The work of Somoye and Ilo (2009), on the impact of macroeconomic instability on the banking sector lending behaviour in Nigeria between 1986 to 2005, also revealed the mechanism transmission of monetary policy stocks to banks operation. The result of cointegration and Vector Error correction showed that exist long-run relationship between bank lending and macroeconomic instability.

Model Specification

In analyzing the causality effect of monetary policy variable on commercial bank lending in Nigeria, The study will make use of secondary data obtained from the Central Bank of Nigeria (CBN) and National Bureau of Statistic (NBS). The sample period ranges from 1980 to 2013.

The study will make use of an error correction Model (ECM) to determine an accurate predictions relationship between monetary policy variables and commercial banks loans in Nigeria.

The following model is specific in an attempt to determined the effectiveness of Monetary

Policy on commercial banks loans and advances in Nigeria as :

$$LCBLA = f(M_2, MPR, LR, IFR\ EXR),\ )\ _____\ (1)$$

Where,

LCBLA = Commercial Banks loans and Advances.

M_2 = Broad money supply

MPR = Monetary Policy Rate

LR = Liquidity Ratio of Commercial Banks

EXR = Exchange Rate

IFR= Inflation Rate

Hence, the estimating equation used in this model is:

$$LCBLA= \beta_o + \beta_1 M_2 + \beta_2 MPR + \beta_3 LR + \beta_4 IFR + \beta_5 EXR + U_1\ \text{-------------}\ (2)$$

β_o = Constant intercept

β_1, β_2, β_3, β_4, and β_5 are Coefficient of the explanatory variable

U = Stochastic variable

Similarly, LCBLA is measured by the total bank loan to private and public sectors,

M_2 is the Broad money supply, a measure of money supply that includes cash and checking deposits (M_1) as well as near money. "Near money" in M_2 includes savings deposits, money market mutual funds and other time deposits, which are less liquid and not as suitable as exchange mediums but can be quickly converted into cash or checking deposits.

Minimum Policy Rate (MPR); The MPR is the official interest rate of the CBN, which anchors all other interest rates in the money market and the economy. CBN's decision on the MPR affects the level of economic activities and prices in the country through a number of channels.

LR is liquidity ratio. Liquidity ratio is the ratio of total specified liquid cash reserve assets to total current liabilities; CRR is cash reserve ratio. Cash reserve ratio is the ratio of requirement to total current liabilities; INF is inflation rate. Is a measure of general price changes in the economy, which can exert volatility shocks pressure on banks operations through lending and savings; EXR is exchange rate. It is proxy as the exchange rate of one dollar to naira

Results Presentation and Analysis: This part is centered on the result for data analysis.

Unit Root Test

The Augmented Dickey-Fuller (ADF) test was employed to test for the existence of unit roots in the data using trend and intercept. The results are presented in table one below.

Table 1: Augmented Dickey Fuller Unit Root Test

Trend and Intercept @ Levels

Series	ADF Test Statistic	5% critical values	10% critical values	Order	Remarks
LCBLA	-1.953205	-3.552973	-3.209642	0	Not Stationary
LM2	-2.264083	-3.552973	-3.209642	0	Not Stationary
MPR	-2.747358	-3.552973	-3.209642	0	Not Stationary
LR	-2.903310	-3.552973	-3.209642	0	Not Stationary
IFR	-3.015452	-3.552973	-3.209642	0	Not Stationary
EXR	-2.124858	-3.552973	-3.209642	0	Not Stationary

Source: Researcher's compilation from E-view (version 7.0)

Table 2: Augmented Dickey Fuller Unit Root Test
Trend and Intercept @ 1st Difference

Series	ADF Test Statistic	5% critical values	10% critical values	Order	Remarks
LCBLA	-5.030823	-3.557759	-3.212361	1	Stationary
LM2	-3.029292	-3.557759	-3.212361	1	Not Stationary
MPR	-7.286790	-3.557759	-3.212361	1	Stationary
LR	-5.544222	-3.557759	-3.212361	1	Stationary
IFR	-5.476967	-3.557759	-3.212361	1	Stationary
EXR	-5.232241	-3.557759	-3.212361	1	Stationary

Source: Researcher's compilation from E-view (version 7.0)

Table 3: Augmented Dickey Fuller Unit Root Test
Trend and Intercept @ 2nd Difference

Series	ADF Test Statistic	5% critical values	10% critical values	Order	Remarks
LCBLA	-9.129829	-3.562882	-3.215267	2	Stationary
LM2	-7.094621	-3.562882	-3.215267	2	Stationary
MPR	-9.418443	-3.562882	-3.215267	2	Stationary
LR	-8.203587	-3.562882	-3.215267	2	Stationary
IFR	-7.458753	-3.562882	-3.215267	2	Stationary
EXR	-9.246700	-3.562882	-3.215267	2	Stationary

Source: Researcher's compilation from E-view (version 7.0)

The above empirical test on unit root test shows that all the variables were not stationary at levels and first difference. However, all the variables are stationary at second difference using ADF test. Considering the time series using Augmented-Dickey Fuller at Trend & Intercept in second difference, all their calculated statistics (with the observation of absolute values) are greater than the critical values at 5% level of significance. The results show that the time series are integrated of the same order; I (2). Thus, a linear combination of series integrated of the same order are said to be co-integrated.

Table 4: Johansen Co-integration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.850568	165.7134	95.75366	0.0000
At most 1 *	0.828976	106.7851	69.81889	0.0000
At most 2 *	0.631484	52.04068	47.85613	0.0192
At most 3	0.302201	21.09423	29.79707	0.3518
At most 4	0.247832	9.939670	15.49471	0.2854
At most 5	0.035205	1.111015	3.841466	0.2919

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

The summary of the Johansen Co-integration Test was shown in the Table 4 above. The model with lag 2 was chosen with the linear deterministic test assumption. In order to find out if there is long run equilibrium relationship that exists between the commercial bank loans and advances (LCBLA) and the explanatory variables; broad money supply (LM2), monetary policy rate (MPR), liquidity ratio (LR), inflation rate (IFR) and exchange rate (EXR). Using the Johansen Co-integration Test, there are three co-integrating equations? In Johansen's Method, the Eigen value statistics is used to determine whether co-integrated variables exist. As can be seen from the trace statistics, here the absolute values of the variables are [165.71 > 95.75], [106.79 > 69.82], [52.04 > 47.86], [21.09 < 29.79], [9.94 < 15.49] and [1.11 < 3.84]. In other words, the null hypothesis of no co-integration among the variables is rejected since at least three variables in the equations at 5% are statistically significant. The test result shows the existence of a long-run equilibrium relationship among the variables.

With the identification of cointegrating equations among the variables employed for estimation, error correction model (ECM) estimation presents the only option for predicting the dynamic behaviour of LCBLA in response to LM2, MPR, LR, IFR and EXR

Table 5: ECM

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.004351	0.039780	0.109364	0.9138
D(LM2,2)	0.307406	0.418069	0.735299	0.4690
D(LR,2)	-0.006922	0.003241	-2.135789	0.0427
D(IFR,2)	-0.000896	0.002153	-0.416124	0.6809
D(EXR,2)	-0.001312	0.002232	-0.587938	0.5618
ECM(-1)	-0.891827	0.195159	-4.569757	0.0001

R-Squared = 0.569063, F-Statistics = 6.602, Prob. (F-Statistic) = 0.000481, DW = 2.07

The Error correction term met the required conditions. Negative sign and statistical significance of the error correction coefficients are necessary conditions for any disequilibrium to be corrected. In light of this, the coefficient of ECM (-1) is -0.892. The negative sign of the coefficient satisfied one condition while the fact that its P-value [0.0001] is less than 5% [0.05] level of significance satisfied the second condition of statistical significance. The coefficient indicated that the speed of adjustment between the short run dynamics and the long run equilibrium is 89.2%. Thus, ECM will adequately act to correct any deviations of the short run dynamics to its long-run equilibrium by 89.2% annually.

The computed coefficient of multiple determination (R^2) value of 0.569 indicated that 56.9% of the total variation in commercial loans and advances (LCBLA) is accounted for, by the explanatory variables: broad money supply (LM2), monetary policy rate (MPR), liquidity ratio (LR), inflation rate (IFR) and exchange rate (EXR) while 43.1% of the changes in CBLA is attributable to the influence of other factors not included in the regression equation. The entire regression plane is statistically significant as confirmed by the P-value of F-statistics [0.000481]. The model is free from autocorrelation as ascertained by the high value of Durbin Watson statistics [2.07].

In order to examine the cause and effect of monetary policy variables on commercial banks loans and advances in Nigeria, granger causality test is performed.

Table 5: Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
LM2 does not Granger Cause LCBLA	32	6.91356	0.0038
LCBLA does not Granger Cause LM2		0.46319	0.6342
MPR does not Granger Cause LCBLA	32	3.38145	0.0489
LCBLA does not Granger Cause MPR		0.97073	0.3916
LR does not Granger Cause LCBLA	32	1.47850	0.2459
LCBLA does not Granger Cause LR		0.46844	0.6310
IFR does not Granger Cause LCBLA	32	1.45989	0.2500
LCBLA does not Granger Cause IFR		1.24432	0.3041
EXR does not Granger Cause LCBLA	32	0.31922	0.7294
LCBLA does not Granger Cause EXR		8.52132	0.0014

Source: Researcher's compilation from E-view (version 7.0)

The F-statistic for LM2 => LCBLA is 6.91 and its P-value is [0.0038]. The statistical value for causality from LCBLA => LM2 is 0.46 while its P-value is [0.6342]. The causality that runs from [LM2 => LCBLA] is statistically significant as confirmed by P-value [0.0038]. More so, it was found that the causality which runs from [LMPR => LCBLA] and [LCBLA => EXR] are statistically significant as confirmed by their P-values [0.0489, 0.0014] respectively. In the light of this, there is a causal relationship between monetary policy variables and commercial banks loans and advances in Nigeria within the period under study.

Implications of the Results

It was found that there is a causal relationship between monetary policy variables and commercial banks loans and advances in Nigeria from 1980-2013. This implies that there existed cause and effect between commercial

bank loans and advances and the monetary policy variables. Specifically, money supply proved to be a significant parameter which causes commercial bank loans and advances. Also, causality runs from monetary policy rate to commercial bank loans and advances. On the other hand, commercial bank loans and advanced was found to significantly influence exchange rate.

In ECM, disequilibrium of the system was found to be corrected at a speedy rate by 89.2% yearly. It is estimated from the result, 1% increase in money supply will bring about 0.3% increase in commercial bank loans and advances. However, any increase in liquidity ratio, inflation rate and exchange rate, will bring about decrease in the commercial bank loans and advances. The findings validated the importance of bank rate in the monetary policy activities. Seeing that bank rate is the rate of interest at which the central bank lends to the banking system, which will, in turn, affect the rates at which the commercial banks lend to their customers. Obviously, changes in bank rate will affect commercial banks lending rate. An increase in the bank rate, for example, will raise the rate of interest on loans made by commercial banks to their customers. This will reduce borrowing and consequently money supply. On the other hand, a fall in the bank rate will reduce interest on loans made by commercial banks. This will encourage more customers to secure loans from their banks thereby, increasing the amount of bank loans by the commercial banks.

Conclusion and Recommendations

In conclusion, this study generally sought to examine the cause and effect of monetary policy variables on commercial banks loans and advances in Nigeria. The study employed ex-post facto research design using Nigeria's data obtained from CBN (1980-2013). The empirical results were on Augmented Dickey Fuller test was conducted. The presence of long run equilibrium found led to the use of Error Correction Mechanism (ECM). It was found that there is a causal relationship between monetary policy variables and commercial banks loans and advances in Nigeria within the period under study. Money supply was found to be a significant parameter which causes commercial bank loans and advances. Also, causality runs from monetary policy rate to commercial bank loans and advances. On the other hand, commercial bank loans and advanced was found to significantly influence exchange rate. In ECM, result indicated that, increase in money supply, on the average, will bring about increase in commercial bank loans and advances. However, any increase in liquidity ratio, inflation rate and exchange rate, will bring about decrease in the commercial bank loans and advances. In view of the findings, the relevant monetary authorities should apply with caution monetary policy variables to significantly influence the commercial banks loans and advances. Expansionary monetary policy should be adopted by the CBN force down interest rate and increase money supply because a fall in the bank rate will reduce interest on loans made by commercial banks. This will encourage more customers to secure loans from their banks thereby, increasing investment opportunities in the country ceteris paribus.

REFRENCES
Central Bank of Nigeria (2005): Annual Report and Statement of Account, CBN, Abuja.
Central Bank of Nigeria (2008): Annual Report and Statement of Account, CBN, Abuja.
Central Bank of Nigeria (CBN) Statistical Bulletin,
Ajayi, Felix o and Atanda, Akinwande A. (2012) Monetary Policy and Bank Performance in Nigeria: A Two-Step Cointegration Approach
Charles Onyeiwu. (2012) Monetary Policy and Economic Growth of Nigeria Journal of Economics and Sustainable Development www.iiste.org .Vol.3, No.7, 2012.
Anyanwu Uchenna and Kalu Alexanda O.U. (2014). The Effect of Central Bank of Nigeria (CBN) Money Supply Management on Commercial Bank Loans and Advances (Cbla) and Output. Kromtit
Matthew. (2015) Monetary Policy and Inflation in Developing Economies: Evidence from Nigeria's Data
CBN (1992) Monetary Policy Department: http://www.cenbank.org.1 Central Bank of Nigeria Statistical Bulletin for several issues: http://www.cenbank.org/
CBN (2008). Central Bank of Nigeria (CBN). Monetary Policy Department Series 1, 2008.CBN/MPD/Series/01/2008. www.cbn
CBN (2006). Central Bank of Nigeria (CBN), Monetary Policy Series CBN/MPD/Series/03/2006
Oluwatosin Olatunji Ogunyomi (2011). The impact on Monetary policy on commercial Banks loans and advances in Nigeria: An Empirical investigation (1975-2009)
Somoye, R. O. C and B. M., Ilo (2009): The Impact of Macroeconomic Instability on the Banking Sector Lending Behaviour in Nigeria Journal of Money, Investment and Banking,Issue 7.
Younus Sayera and Mahfuza Akhtar (2009): The SLR as a Monetary Policy Instrument in Bangladesh. IMF Occasional Paper No. 234, Washington, International Monetary Fund.
Folawewo, A and Osinubi, T. (2006). Monetary policy and Macroeconomic instability in Nigeria: A Rational Expectation Approach'. Journal of Social Science, vol.12 (2): pp.93-100.
NTO Philips O. O. Mbanasor Jude. A .& Osuala Alex E. (2012): Influence of Monetary Policy Variables on Loan

Supply to Small and Medium Scale Enterprises in Nigeria; International Journal of Economics and Finance Vol. 4, No. 7; July 2012.

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