
EFFECT OF MONETARY POLICY ON THE PERFORMANCE OF DEPOSIT MONEY BANKS IN NIGERIA: 1987- 2017

¹Aginam Chinagorom Judith & ²Obi-Nwosu, Victoria O.

¹Department of Banking and Finance Federal Polytechnic, Oko, Nigeria.

² Department of Banking and Finance, Nnamdi Azikiwe University, Awka, Nigeria.

¹chinagoromaginam@yahoo.com ² ladyvicon@gmail.com

Abstract

This study examined the effect of monetary policy on banks performance in Nigeria. The variables of monetary policy rate, liquidity ratio, broad money supply and interest rate were regressed on return on equity (ROE) for the period of 30 years (1987- 2017). The study adopted an ex-post facto research design because the data for the study are secondary data that already existed. Econometric techniques, including Augmented Dicker Fuller and Philip Perron tests for unit roots and Ordinary Least Square (OLS) were employed for the analysis. The result of the study indicate that monetary policy rate, liquidity ratio and broad money supply have positive and significant effect on return on equity (ROE) while interest rate has negative and insignificant effect on return on equity (ROE) within the period under review. The study thus concludes that monetary policy can be used to influence the performance of deposit money banks in Nigeria. The study recommends that interest rate should be reduced to a single digit. Bank management should ensure that capital is properly channeled to the productive sector of the economy. The relevant monetary authorities should apply with caution monetary policy variables to significantly influence commercial banks loans and advances. Expansionary monetary policy should be adopted by the CBN to 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*.

Key Words: Monetary Policy, Deposit Money, Commercial Bank

Introduction

Monetary policy constitutes the major policy thrust of a government in the realization of various macro-economic objectives. Essentially, monetary policy refers to the combination of discretionary measures designed to regulate and control the money supply in an economy by the monetary authorities with a view of achieving stated or desired macro-economic goals.

Monetary policy is one of the macroeconomic instruments with which nations (including

Nigeria) do manage their economies (Ajie and Nenbe, 2010). According to Ubi, Lionel and Eyo (2012), monetary policy is an aspect of macroeconomics which deals with the use of monetary instruments designed to regulate the value, supply and cost of money in an economy, in line with the expected level of economic activity.

The role of the banking sector in the economic development of a nation cannot be overstressed. It is the channel through which idle funds are made available to the productive sector, thereby facilitating the use of surpluses in the economy to generate

employment and promote economic welfare. The banking sector provides strong confidence for depositors, thereby motivating and encouraging savings in the economy. A strong financial sector also helps to sustain an economy against external shock that may arise from fall in external capital flow.

A strong and well-developed financial sector is needed to achieve sustained growth (Aurangzeb, 2012).

Akomolafe (2014) opined that sustainable economic growth is often associated with countries with strong financial sector. The recent incidence of banking and financial crises in the world, and its aftermath on the world economies gives credence to the importance of the sector on the performances of an economy. More importantly, the banking sector also serves as the avenue through which the monetary policies of the government are carried out. As a stabilization policy, monetary policy involves the use of monetary instruments to regulate or control the volume, cost, availability and the direction of money and credit in an economy to achieve some specific macroeconomic policy objectives.

Central Bank of Nigeria (CBN) takes a number of monetary policy decisions, including a change in the level of money supply (M_2), 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 (M_1) = C+DD is defined to include currency in circulation plus demand 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. (M_2) = C+DD+TD. 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 money supply by the CBN and its effects on commercial bank loans. When the CBN changes the level of money supply, it does so through the control of the monetary base. Monetary base 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.

Monetary policy refers to the combination of measures designed to regulate the value, supply and cost of money in an economy. It can be described as the art of controlling the direction and movement of credit facilities in pursuance of stable price and economy growth in an economy (Chowdhury, Hoffman and Schabert, 2003). Monetary policy refers to the actions of the Central Bank to regulate the money supply which could be through discretionary monetary policy instruments such as the open market operation(OMO), discount rate, reserve requirement, moral suasion, direct control of banking system credit, and direct regulation of interest rate (Loayza, and Schmidt-hebbel, 2002). Monetary policy comprises the formulation and execution of policies by the central bank to achieve the desired objective or set of objectives; the policies and decisions are aimed at guiding bank lending rates to levels where credit demand and

money growth are at a level consistent with aggregate supply elasticity (Loayza and Schmidt, 2002). The objectives and goals that the central bank seeks to achieve generally are low inflation (usually targeted), protection of value of currency, full employment and sustainable economic output (economic growth).

Monetary policy framework comprises the rule and action adopted by the central bank to achieve its full employment objective, domestic and financial stability, normal operation of foreign payments primarily and the price stability objective (Adeoye, Ojapinwa and Odekunle, 2014). Monetary policy is among the macroeconomic instruments with which the monetary authority of a country controls the supply of money, often targeting a rate of interest for the purpose promoting economic growth and stability (Anyanwu and Kalu, 2014). The prime purpose of implementing monetary policy usually includes relatively stable price, high Real GDP and low unemployment (FRB, 2006). Also it is the actions of a Central Bank, Currency Board or other regulatory committee that determines the size and rate of growth of the money supply, which in turn affects interest rates. Monetary policy is maintained through measures such as increasing or reducing the interest, or changing the amount of money banks need to keep in their vault (Bank reserves) (Investopedia, 2014).

Matemilola, Bany-Ariffin and Muhtar (2015) examined the impact of monetary policy on bank lending rate in South Africa. The study regressed lending rates (BLR) on money market rate (MMR) using the cointegration and error correction mechanism. The asymmetric error correction results show that bank lending rate responds faster to a decrease in the money market rate. The study thus posits that monetary policy has positive effect on the financial intermediation of banks.

Maigua and Muoni (2016) employed broad money supply; cash reserve requirement, inflation rates, discount rates, and exchange rate to determine the influence of monetary policy on performance of banks. Multiple regression technique was employed on a sample of 26 out of 43 commercial banks operating in Kenya. The result revealed that cash reserve requirement ratio had negative influence on bank performance. Thus the study posited that higher levels of reserve requirement ratio result in lower bank performance in Kenya.

Ndugbu and Okeke (2015) examined the effect of monetary policy on the performance of deposit money banks in Nigeria using 1993-2013. The study employed banks deposit as the dependent variable and cost of lending rate, liquidity ratio, deposit rate and cash reserve ratio as the explanatory variables. The results from Ordinary Least Square and co integration revealed that amongst all the monetary policy variables, only bank deposit rate has significant relationship through inverse relationship.

Omankhanlen, Okorie and Taiwo (2015) investigated the effects monetary policy has on loan risk exposure in Nigeria Commercial Banks. The ordinary least square multivariate regression perspective within the confinement of a vector error correction model (VECM) framework was used for analyses. The level of loan risk exposure of banks was the dependent variable, while liquidity ratio, cash reserve ratio, monetary policy rate,

and average exchange rate were independent variables. The results showed that monetary policy has long run significant effect on bank loan risk exposure in Nigeria.

Ekpung, Udude and Uwalaka (2015) investigated the effect of monetary policy on banking sector performance in Nigeria using bank's deposit liabilities as proxy for bank performance covering 36 years from 1970 to 2006. The explanatory variables of monetary policy were Exchange Rate (EXR), Deposit Rate (DR) and Minimum Discount Rate (MDR). Results showed that overall; monetary policy has a significant effect on the banks deposit liabilities. They concluded that monetary policy plays a vital role in determining the volume of bank's deposit liabilities in Nigeria.

Sheyin (2015) examined the impact of deposit money banks' investment on treasury Bills and the impact thereof on the amount of credit extended by these banks to the private sector in Nigeria. The study estimated a model which suggests that supply of loans and advances by DMBs was a function of Total deposit, Treasury Bills, FGN Bonds, interbank rates, and the Yield spread between Loans and Treasury Bills. A Vector Error Correction (VEC) technique was used to estimate the model using quarterly data for the period of 2003-2013.

The theoretical framework of this study is the Quantity Theory of Money by Irving Fisher's 1890s, during the debate about bimetallism, and reached its high point in 1911 with the publication of *The Purchasing Power of Money*. The quantity theory of money states that the quantity of money is the main determinant of the price level or the value of money. Any change in the quantity of money produces an exactly proportionate change in the price level. In the words of Irving Fisher, "Other things remaining unchanged, as the quantity of money in circulation increases, the price level also increases in direct proportion and the value of money decreases and vice versa." If the quantity of money is doubled, the price level will also double and the value of money will be one half. On the other hand, if the quantity of money is reduced by one half, the price level will also be reduced by one half and the value of money will be twice. Keynes, 1930.

Statement of the Problem

Monetary policy is one of the principal economic management tools that governments use to shape economic performance. Measured against fiscal policy, monetary policy is said to be quicker at resolving economic shocks. Monetary policy objectives are concerned with the management of multiple monetary targets among them price stability, promotion of examine growth, achieving full employment, smoothing the business cycle, preventing financial crises, stabilizing long-term interest rates and the real exchange rate. This depends on the exigency facing each country at a giving point in time. Experience shows that emphasis is usually placed on maintaining price stability or ensuring low inflation rates.

The effectiveness of monetary policy on the real economy is still an issue under intense debate particularly related to the efficacy of the transmission. Research carried out on the choice of optimal monetary policy instrument for Nigeria by Adeusi, Kolapo, and Aluko (2014); Anyawu and Kalu (2014); Uwazie and Aina (2015) have found that

monetary policy has positive effect on the performance of deposit money banks in Nigeria. However, other authors such as Enyioko (2012); Ajayi and Atanda (2012); Philips, Mbanasor and Osuala (2012); Ogunyemi (2013); Okoye, and Eze (2013); Okoro (2013); Imoisi, Olatunji, and Ekpenyong (2013); Jegede (2014); Danlad and Babalola (2015) posited that monetary policy has negative effect on the performance of deposit money banks in Nigeria. Several gaps have been identified in current literature and research with respect to monetary policies, the literature reveals while there is much effort by governments to influence the money supply by instituting various policies. Analysis on the effectiveness of these tools which mainly depends on the reaction of deposit money banks is lacking. This study will therefore fill the knowledge gap as it looks at effects of the various monetary policy tools on the performance of deposit money banks in Nigeria.

Method

Research Design

The study adopted an ex-post facto research design because the data for the study are secondary data that already in existence

Sources of Data

The study used secondary data that were sourced from financial publications such as the Central Bank of Nigeria, Statistical Bulletin and CBN Annual Reports and Statement of Accounts, Nigeria Bureau of Statistics (NBS) for the period under review.

Variables of the Study

The model aims to regress a number of selected monetary policy instruments variables on performance of deposit money banks in Nigeria which will be proxied by return on equity (ROE) which is the dependent variable (Y) while monetary policy rate, liquidity ratio, broad money supply and interest rate are the independent variables(X).

Model Specification

The model used for the study was adopted from the work of Uwazie, and Aina, (2015) who examined the impact of monetary policy on commercial banks in Nigeria.

The model is stated thus

$$ROE = f(MPR, LR, M_2)$$

Where,

ROE = Return on Equity

MPR= Monetary Policy Rate

LR = Liquidity Ratio of Commercial Banks

M₂ = Broad money supply

β₀ = Constant intercept

The model was adopted and modified as follows:

$$ROE = f(MPR, LR, M_2, ITR)$$

Where,

ROE = Return on Equity

MPR= Monetary Policy Rate

LR = Liquidity Ratio of Commercial Banks

M_2 = Broad money supply

INTR = Interest rate

β_0 = Constant intercept

Hence, the estimating equation used in this model is:

$$ROE = \beta_0 + \beta_1 MPR + \beta_2 LR + \beta_3 M_2 + \beta_4 ITR + U_1 \dots \dots \dots 1$$

β_0 and μ are the constant and error term respectively while β_1 , β_2 , β_3 and β_4 are the coefficients of monetary policy rate, liquidity ratio, broad money supply and interest rate equity respectively.

Method of Analyses

The data were analyzed with econometric techniques involving descriptive statistics, Augmented Dickey Fuller and Philip Perron tests for unit roots, Johansson technique for cointegration test for long run relationship, Granger Causality Test and the ordinary least square (OLS).

Data Presentation and Analysis

Unit Root

The data gathered are subjected to Unit root test. Since carrying out regressions on non stationary time series data would lead to spurious regression outcomes, we employed the widely used Augmented Dickey-Fuller (ADF) and Philip and Peron test to ascertain the stationarity of the data.

Table 2: The Unit Root Test Result

Variables	At Level				Decision
	Augmented Dicker Fuller Test		Philip and Test	Peron	
	t-Statistic	Prob.	Adj. t-Stat	Prob.	
ROE	-5.133424	0.0039	-1.996650	0.0005	Stationary at level
MPR	-7.156835	0.0023	-1.023858	0.0405	Stationary at level
LR	-4.109778	0.0036*	-4.046948	0.0042*	Stationary at level
M_2	-8.662571	0.0000*	-9.114547	0.0000*	Stationary at level
ITR	-2.364762	0.1603	-2.364762	0.1603	Stationary at level

The result of the unit root test shows that ROE, MPR and ITR are non stationary at levels while LR and M_2 are stationary at level. However, all the variables (ROE, MPR, LR, M_2 and ITR) attained stationarity at 1st difference. This is indicated with the probabilities of the test values which are below 0.05 levels of significance. Since the variables are stationary at least at first differences, it is suitable to go on with cointegration test for long run relationship among the variables of the study.

The Ordinary Least Square Regressions

In this section, we provide the benchmark test of the significance of the independent variables in explaining the effect of monetary policy and the performance of deposit money banks in Nigeria.

Dependent Variable: ROE
 Method: Least Squares
 Date: 04/13/19 Time: 12:07
 Sample: 1987 2017
 Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ROE	3.332806.	1638155.	2.034488	0.0518
MPR	2.6.60510	9.234924	2.880923	0.0047
LR	18.32566	6.905754	2.653680	0.0132
M ₂	30.01044	9.365032	2.204520	0.0025
ITR	-4413734	7.571234	1.97564	0.3458
R-squared	0.948027	Mean dependent var		16568137
Adjusted R-squared	0.722253	S.D. dependent var		26065603
S.E. of regression	6263745.	Akaike info criterion		34.25837
Sum squared resid	1.06E+15	Schwarz criterion		34.44340
Log likelihood	-527.0047	Hannan-Quinn criter.		34.31868
F-statistic	164.1679	Durbin-Watson stat		2.173199
Prob(F-statistic)	0.000000			

Computed by the Authors with E-View Software

From the results of the OLS, the constant parameter is positive at 3.332806. This means that if all the independent variables are held constant, ROE as a dependent variable will grow by 3.332806 Units

Monetary Policy Rate (MPR): the coefficient of monetary policy rate (MPR) is positive at 2.6.60510 with probability value of 0.0047 which means that monetary policy rate (MPR) has positive and significant effect on return on equity (ROE). A unit increase on monetary policy rate (MPR) will cause return on equity (ROE) to increase by 2.6.60510 units.

Liquidity Ratio: The coefficient of liquidity ratio (LR) is positive at 18.32566 probability value of 0.0132 which means that liquidity ratio (LR) has positive and significant effect on return on equity (ROE) within the period under study. A unit increase in liquidity ratio (LTR) will lead to a unit increase in (ROE) by 18.32566

Broad Money Supply (M₂): the coefficient of broad money supply is positive at 30.01044 with the probability value of 0.0025 which means that broad money supply has positive and significant effect on return on equity. A unit increase broad money supply will lead to an increase on return on equity by 30.01044 units.

Interest Rate (ITR). The coefficient of interest rate (ITR) is negative at 4413734 with probability value of 0.3458 which means that interest rate has negative and insignificant effect on return on equity. A unit increase in interest rate will lead to a decrease on return on equity by 30.01044 units.

The Adjusted R-squared is 0.722253 which is approximately 70%. This means that 70% of total variation on return on equity can be explained by the variables namely MPR, LR, M_2 and ITR while the remaining 30% is due to other stochastic variables. The Durbin-Watson Statistics is (2.173199) this means the model is free from autocorrelation.

Conclusion and Recommendation

Findings of the study indicate that monetary policy rate, liquidity ratio and broad money supply have positive and significant effect on return on equity while interest rate has negative and insignificant effect on return on equity.

The study thus concludes that monetary policy has positive effect on the performance of deposit money banks in Nigeria

Besides, interest rate has negative and insignificant effect on return on equity. The implication is that the sources and uses of funds have been adversely affected by unsustainable interest rate within the period under study.

Recommendations

The study recommends as follows

1. Interest rate policy should be looked into by the monetary authority in a way that is friendly to loan advancement. This will eventually translate to significant profit for the banks. Also, bank management should ensure that capital is properly channeled in the right direction.
2. The monetary authorities should apply with caution monetary policy variables to significantly influence commercial banks loans and advances. Expansionary monetary should be adopted by the CBN to 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*
3. The reduction of lending rates should be considered to prevent the banks from folding up. The reversion to the modern technique of controlling liquidity in the economy should be encouraged to ensure economic stability.

References

- Adeoye, B., Ojapinwa, T. V. & Odekunle, L. A. (2014). Monetary policy framework and pass-through in Nigeria: *British Journal of Arts and Social Sciences*, 17(1) 14 – 32.
- Adesoye, A. B., Maku, O. E. & Atanda, A. A. (2012). Is Monetary policy a growth stimulant in Nigeria? A Vector Autoregression Approach. *Munich Personal REPEC Archive (MPRA)* No. 35844.
- Adeusi, S.O. ,Kolapo, F.T. & Aluko, A.O. (2014). Determinants of commercial banks' profitability panel evidence from Nigeria. *International Journal of Economics, Commerce and Management*, (2), 12, 7
- Adeusi, S. O., Kolapo, F.T. & Aluko, A.O. (2014). Determinants of commercial banks' profitability panel evidence from Nigeria. *International Journal of Economics, Commerce and Management*, (2),5,3

- Adeusi, S. O., Kolapo, F.T. and Aluko, A.O. (2014). Determinants of commercial banks' profitability panel evidence from Nigeria. *International Journal of Economics, Commerce and Management*, 2 (12),1-18
- Ajayi, F. O. and Atanda, A. A. (2012), Monetary Policy and Bank Performance in Nigeria: A Two-Step Cointegration Approach: *African Journal of Scientific Research* (5),8,2
- Ajayi, F. O. and Atanda, A. A. (2012). Monetary Policy and Bank Performance in Nigeria: A Two-Step Cointegration Approach: *African Journal of Scientific Research Vol. 9, No. 1: 463-476.*
- Ajayi, F. O. and Atanda, A. A. (2012). Monetary Policy and Bank Performance in Nigeria: A Two-Step Cointegration Approach: *African Journal of Scientific Research* (9),1,8
- Ajisafe, R. A. & Folorunso (2002). The relative effectiveness of fiscal and monetary policies in macroeconomic management in Nigeria. *The African Economic and Business Review*, 3(1), 23-40.
- Akanbi T. A. & Ajagbe F. A. (2012). Analysis of monetary policy on commercial banks in Nigeria: *African Journal of Business Management* (6),51,7
- Akanbi T. A. & Ajagbe F. A. (2012). Analysis of monetary policy on commercial banks in Nigeria: *African Journal of Business Management* (6),5,1
- Akoma J. D., Danladi O. & Babalola A. G. Abah (2015). Monetary policy and commercial banks' performance in Nigeria: *Public policy and administration research* (9),4,5
- Akomolafe, K. J (2014). Financial deepening and economic growth: evidence from Nigeria: *International Journal of Economics, Commerce and Management*. (11),11,5
- Akomolafe, K. J (2014). Financial Deepening and Economic Growth: Evidence from Nigeria" *International: Journal of Economics, Commerce and Management*. (1),3,8.
- Amassoma, D., Nwosu, P. I. & Olaiya, S. A. (2011). An appraisal of monetary policy and its effect on macroeconomic stabilization in Nigeria. *Journal of Emerging Trends in Economics and Management Sciences*, 2(3) 232-237.
- Anyanwu, U. & Kalu, A. O. U. (2014). The effect of central bank of Nigeria (CBN) money supply management on commercial bank loans and advances (CBLA) and output. *Singaporean Journal Of Business Economics, And Management Studies*, (2),12,5
- Aurangzeb, C. (2012). Contribution of banking sector in growth of Pakistan: economics and finance review. (6),7,9
- Aurangzeb, C. (2012). Contribution of Banking Sector in Growth of Pakistan". *Economics and finance review*. (2),4,6
- Enyioko N. (2012). Impact of interest rate policy and performance of deposit money banks in Nigeria. *Global journal of management and business research*. (12),22,5
- Enyioko N. (2012). Impact of interest rate policy and performance of deposit money banks in Nigeria. *Global journal of management and business research*. Vol. 12 (21)
- Imoisi, A. I., Olatunji, L.M and Ekpenyong, B.I. (2013). Monetary policy and its implications for balance of payments stability in nigeria: 1980-2010: *International Journal of Economics and Finance*, (5),3,6
- Imoisi, A. I., Olatunji, L.M and Ekpenyong, B.I. (2013). Monetary Policy and Its Implications for Balance of Payments Stability in Nigeria: 1980-2010: *International Journal of Economics and Finance*, (5),6,7
- Ismail, O. F., Adegbemi, B. O. O. & Mariam, A. A. (2013). Does monetary policy influence economic growth in Nigeria? *Asian Economic and Financial Review* 3(5):635-646.
- Iyaji, D., Jbrin, S. M. & Ejura, B. S. (2012). An assessment of the effectiveness of monetary policy in combating inflation pressure on the Nigerian economy. *Erudite Journal of Business Administration and Management (EJBAM)*, 1(1), 7-16,

- Iyaji, D., Jbrin, S. M. & Ejura, S. B. (2012). An assessment of the effectiveness of monetary policy in combating inflation pressure on the Nigerian. *Erudite Journal of Business Administration and Management (EJBAM)*, (1),17,9,
- Jegede C. A.(2014). Effects of monetary policy on the commercial banks lending in Nigeria: *review of Public Administration and Management (3)*,5,9
- K. J. Akomolafe & Babalola A. G. (2015).Monetary Policy and Commercial Banks' Performance in Nigeria: *Public Policy and Administration Research (5)*,9,3
- Mishkin, F. S. & Schmidt-Hebbel, K. (2001). One decade of inflation targeting in the world: what do we know and what do we need to know? *Central Bank of Chile Working Paper No. 101*, July.
- Nwosa, P. I. & Saibu, M. O. (2012). The Monetary Transmission Mechanism in Nigeria: Asectoral Output Analysis: *International Journal of Economics and Finance (4)*,1,7
- Okoro, A. S. (2013). Impact of Monetary Policy on Nigerian Economic Growth: *Prime Journal of Social Science (PJSS) ISSN: (2)*,2,5
- Okoro, A. S. (2013). Impact of Monetary Policy on Nigerian Economic Growth", *Prime Journal of Social Science (3)*, 5,7
- Okoye, V. and Eze, R.O. (2013). effect of bank lending rate on the performance of Nigerian deposit money banks: *International Journal of Business and Management Review, (1)*,5,7
- Onyeiwu, C. (2012). Monetary Policy and Economic Growth Of Nigeria. *Journal of Economics and Sustainable Development*, 3 (7) 62 70.
- Saibu, M. O. & Nwosu, L. P. (2011). Effects of monetary policy on sectoral output growth in Nigeria (1986-2008). *Journal of Economics and Behavioural Studies*, 2(6):245-254.
- Sayera, Y. (2012). Relative effectiveness of monetary and fiscal policies on output growth in bangladesh: A Cointegration and Vector Error Correction Approach. *International Journal of Economics*, 36(2) 123 – 129.
- Solomon, O. (2012). Credit Risk Management as a tool For Bank Survival: www.independent.academia.edu/kingsooloo
- Uwazie, I. U Ph.D Aina, Temitope, H(2015). Monetary policy variables and commercial banks' loans: a causality approach: *Research Journal of Finance and Accounting www.iiste.org ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) (6)*,18,7
- Uwazie, I. U Ph.D Aina, Temitope, H(2015). Monetary policy variables and commercial banks' loans: a causality approach: *research journal of finance and accounting (3)*,58