



# **IMPACT OF MONETARY POLICIES ON ALLOCATION OF LOAN AND ADVANCES TO SMALL AND MEDIUM SCALE ENTERPRISES IN NIGERIA**

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## **Abstract**

*This study analyzed the effect of monetary policy on allocation of loan and advances to small and medium scale enterprises in Nigeria from the period of 1992 to 2017. The study made use of secondary data obtained from the Central Bank of Nigeria (CBN) and National Bureau of Statistic (NBS). It adopted commercial banks loan and advances as the dependent variable while money supply, interest rate, monetary policy rate, liquidity ratio of commercial banks, inflation rate and exchange rate are the independent variables. Using the Ordinary Least Square regression method, the study revealed that monetary policy rate and exchange rate were positively related to commercial bank loans and advances to small and medium scale enterprises. On the other hand, money supply, liquidity ratio and inflation rate negatively affect commercial banks loans and advances to SMEs in Nigeria. The study concluded that effort*

*should be made by government to reduce monetary policy rate thereby making commercial banks loan and advances accessible by small and medium scale enterprises in Nigeria.*

*Keywords: Monetary policies, Allocation of loan and advances, Small and medium scale enterprises, Nigeria*

## **INTRODUCTION**

Small and medium scale enterprises (SMEs) have played vital roles in the course of industrial development and economic growth, by boosting employment, generating income and facilitating development in urban and rural areas of most countries. (Olutoye, Akinmulegun and Olutoye, 2014). World economies due to SMEs, have been able to curb the problem of unemployment, decrease poverty, and boost productivity thereby leading to economic growth. In Nigeria, the role of SMEs in its economic development have been acknowledged. This had led the Nigerian government to approve the small and medium scale enterprises (SMEs) than the large scale capital intensive industries since the '80s (Ovat, 2016). The growth and development of SMEs is therefore seen as a key and an absolute instrument in the industrialization process of Nigeria. However, the survival of SMEs is dependent on adequate financing. Likewise, Ovat (2013) and Afolabi (2013) confirmed the problem of SMEs in Nigeria to be financial limitation. World Bank (2013) opined that SMEs of most developing countries are overwhelmed with lack of capital which affects their ability to grow. The deposit money banks' credit is known to be one of the major sources of funds for the survival of SMEs. According to Iloh and Chioke (2015), deposit money banks through their intermediation role provide financial leverage for small and medium scale enterprises, thereby aiding their growth.

Monetary policy is a chief economic stabilization instrument that is designed to control the volume, cost, availability and direction of money and credit in an economy in order to realize some certain macro-economic policy objectives. Monetary policy in Nigeria over the years according to Uwazie and Aina (2015) has been actions taken by the monetary authority to effect directly or indirectly or both, the volume of money and credit to the economy and the structure of interest rates so as to sustain the rate of economic growth, price stability and balance of payment equilibrium. Monetary policy uses a variety of monetary instruments to control economic growth, inflation, exchange rates with other currencies and unemployment. Uwazie and Aina (2015) opined that fiscal and monetary policies are essential in achieving economic stability.

However, the services of deposit money banks especially in granting of loans and advances can be assessed through the performance of monetary policy instruments; these

instruments affect the performance of the bank in granting loans to the public. By employing these instruments, central banks control the volume of the money supply, the level of interest rate, security prices, credit availability and liquidity creation of deposit money banks. Ajie and Nenbe (2010) noted that bank reserves are controlled by the Central Bank through its various instruments of monetary policy. The instruments comprise of the cash reserve requirement, liquidity ratio, open market operations and primary operations which have effects on bank reserves. These actions influence bank operations and their ability to create sufficient liquidity and additional funds; this thus influence the cost and availability of loanable funds. This paper thereby examines the impact of monetary policies on the allocation of loans and advances to small and medium scale enterprises in Nigeria.

## LITERATURE REVIEW

Various researchers in both the developed and developing countries have examined the impact monetary policy has on bank loans and advances to small and medium scale enterprises. Gambacorta and Iannotti (2005) examined in their paper how the velocity and irregularity of bank interest rates (lending, deposit, and inter-bank) respond to monetary policy changes from 1985-2002 in Italy. They used the Asymmetric Vector Correction Model (AVECM) to analyse the different behaviors of the data in the short-run and long-run. The findings showed that in the short run, the speed of adjustment of bank interest rate to monetary policy changes impacted significantly after the introduction of the 1993 Banking Law while interest rate adjustment were irregular in response to positive and negative shocks. In the long- run the equilibrium is unique. The findings also showed that banks adjust their loan (deposit) prices at a faster rate when there is monetary tightening. Kashyap and Stein (1995) also found in their study that business lending has an impact due monetary policy tightening. They found that when there is a policy tightening, both total loans and business loans at small banks reduce, while loans at large banks are not affected. The reduction of loans in small banks could be due to having less access to alternative funding sources unlike the large banks. Van den Heuvel (2005) in a related study showed that monetary policy affects bank lending through two channels. They argued that by lowering bank reserves, contractionary monetary policy reduces the extent to which banks can accept reservable deposits, if reserve requirements are binding. The decrease in reservable liabilities will, in turn, lead banks to reduce lending, if they cannot easily switch to alternative forms of finance or liquidate assets other than loans.

There are several related studies in developing countries that showed the effect monetary policy had on bank credits. Kapoor (2017) in the paper do highly liquid banks insulate their lending behavior examined bank lending behaviour during changes in monetary policy in

India. The data used was from the year 1995-2015. The paper used uninsured, non-reservable liabilities such as time deposits and investigated whether banks are able to insulate themselves during a monetary policy change. The study showed that loan supply shock can be nullified due to post monetary policy changes. Also, the less liquid and small banks are affected more by monetary shocks. Younus and Akhta (2009) researched on the significance of Statutory Liquidity Requirement (SLR) as a monetary policy instrument in Bangladesh. The study used descriptive analysis techniques and found that reduction in SLR impacts positively on bank credit and investment before the 1990s. SLR and Cash Reserve Requirement (CRR) were important tools for reducing inflation and also in situations of drastic imbalance-resulting from major shocks. Amidu and Wolfe (2008) also researched on the constrained implication of monetary policy on bank lending in Ghana between 1998 and 2004. The study showed that lending behaviour of banks impact significantly on Ghana's economy as money supply changes. Their findings also showed that prime rate had a negatively significant while inflation rate had a negatively insignificant effect on bank lending.

Amidu (2006) examined whether bank lending is affected by monetary policy in Ghana. The study used panel cross sectional data from the year 1998 to 2004 from the database of Bank of Ghana, ISSER and International Financial Statistics of IMF. The study found that the country's economic activities and changes in money supply have a significant effect on Ghanaian banks' lending behaviours. Furthermore, the study showed that bank size and liquidity significantly impact banks' ability to extend credit when demanded. Punita and Somaiya (2006) researched on the impact of monetary policy on profitability of banks in India for the period of 1995 – 2000. The findings showed that lending rate has a positive and significant impact on banks' profitability. This indicated that as lending rates will reduces, the profitability of the banks decreases. The study also found that bank rate, cash reserve ratio and statutory ratio have a negative significance on profitability of banks.

Philips, Mbanasor & Osuala (2012) worked on the influence of monetary policy variables on banks' credit supply to small and medium scale enterprises (SMEs) in Nigeria. The study used the time series data got from the Central Bank of Nigeria (CBN) Statistical bulletin and the financial statements of the banks used. The research covered the period 1995-2010 and used the Fully Modified Least Squares (FMOLS) as the method of analysis. The FMOLS specified that policies on interest rate and liquidity ratio were negatively and positively significant to credit supply given to SMEs. Also, Jegede (2014) researched on the effect of monetary policy on commercial bank lending in Nigeria between the years 1988 to 2008. Macroeconomic time series variables of exchange rate, interest rate, liquidity ratio, money supply, and commercial bank loan and Advances were used. Using Vector Error Correction Mechanism of Ordinary

Least Square econometric technique, the study found a long run relationship existing among the variables in the model. The study showed that exchange rate and interest had a positive and significant effect while liquidity ratio and money supply had negative effect on commercial banks' loan and advances. It was concluded that monetary policy instruments are not effective to influence commercial bank loans and advances in the long-run, while banks' total credit is reacts more to cash reserve ratio.

In a related study, Uwazie and Aina (2015) examined the cause and effect of monetary policy variables on Commercial Banks Loans and Advances in Nigeria for the period 1980-2013 in their study. It was found that there was a causal relationship between monetary policy variables and commercial banks loans and advances in Nigeria within the period. This suggested that there were existed cause and effect between commercial bank loans and advances and the monetary policy variables. Money supply had a significant effect on commercial bank loans and advances while, commercial bank loans and advances was found to have significant effect on exchange rate. Also, any increase in liquidity ratio, inflation rate and exchange rate brings about a decrease in the commercial bank loans and advances. While Ajayi & Atanda 2012 examined the effect of Monetary Policy on Bank Performance in Nigeria: The Engle-granger two step co integration approach was used as a method of analysis. The findings revealed that monetary policy instruments had no significant effect on credit in the long-run, while banks total credit is more responsive to cash reserve ratio.

## METHODOLOGY

In analyzing the effect of monetary policy on allocation of loan and advances to small and medium scale enterprises 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 1992 to 2017.

The study made use of ordinary least square to determine an accurate predictions relationship between monetary policy on allocation of loan and advances to small and medium scale enterprises in Nigeria The following model is specific in an attempt to determined the effectiveness of Monetary Policy on allocation of loan and advances and small and medium scale enterprises in Nigeria as:

$$CBLSME = f (MS, INT, MPR, LR, INF, EXR) \text{ ----- (1)}$$

Where,

CBLSME = Commercial Banks loans and Advances to SME.

MS= Money supply

INT= Interest rate

MPR = Monetary Policy Rate

LR = Liquidity Ratio of Commercial Banks

INF= Inflation Rate

EXR = Exchange Rate

Hence, the estimating equation used in this model is:

$$CBLSME = \beta_0 + \beta_1 MS + \beta_2 INT + \beta_3 MPR + \beta_4 LR + \beta_5 INF + \beta_6 EXR + U_t \text{ ----- (2)}$$

$\beta_0$  = Constant intercept

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  and  $\beta_6$  are Coefficient of the explanatory variable

$U_t$  = Stochastic variable

## RESULTS

The primary aim of this study is to explore the effect of monetary policy on allocation of loan and advances to small and medium scale enterprises in Nigeria. The model specified in the methodology was tried with both linear and log-linear specifications. The results showed that the linear specifications appeared better in the model. This is because it has high  $R^2$  of 87%. The result of commercial bank loan and advances to small and medium scale enterprises as reported in table 1 in this session, showed that the coefficient of determination- $R^2$  is 0.87, with the value of the Adjusted  $r^2$  as 0.74 indicating that the variation in commercial bank loan and advances to small and medium scale enterprises can be explained by money supply, interest rate, monetary policy rate, liquidity rate, inflation rate and exchange rate is 87% while the remaining 13% is accounted for by the stochastic variable.

Therefore, the explanatory power of the model estimated is 87%. The coefficient of the dependent variable (commercial bank loan and advances to small and medium scale enterprises) appeared to be positive and statistically significant. The regression coefficient of money supply appeared to be negative and not statistically significant at 5% level, the result implies that 1% change in money supply will increase commercial bank loan and advances to small and medium scale enterprises will bring about 61% decrease to commercial bank loan and advances to small and medium scale enterprises. The regression coefficient of monetary policy rate is positive and statistically insignificant, hence a unit change in monetary policy rate will yield to 16% change in commercial bank loan and advances to small and medium scale enterprises in Nigeria. The coefficient of liquidity ratio appeared to be negatively related with commercial bank loan and advances to small and medium scale enterprises, as a result 1% change in liquidity ratio will bring about 21% decrease in commercial bank loan and advances to small and medium scale enterprises. The coefficient of inflation rate is negative and statistically significant, this implies that 1% change in inflation rate will significantly decrease commercial

bank loan and advances to small and medium scale enterprises by 72%. Exchange rate indicated an insignificant positive relationship with commercial bank loan and advances to small and medium scale enterprises, therefore, a unit change in exchange rate will bring about a 43% increase in commercial bank loan and advances to small and medium scale enterprises in Nigeria. Also, the overall model is significant at 5% level given the f-value of 6.717346 with the probability of 0.0283. The Durbin Watson value of 2.784 > 2, which indicated that the model is free from serial autocorrelation. From the analysis so far, it is clear that the regression results are reliable and would help us come to useful conclusion, and also make applicable recommendations for further studies in this area of study. It is inferred from the study that money supply and inflation rate variables were significant while monetary policy rate, liquidity ratio and exchange rate were not significant at 5% level of significant. This may be attributed to non-stationarity of time series data that are used for the study.

Table 1: Regression Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.667697	1.032233	6.459488	0.0013
MS	-0.612379	0.206526	-2.965144	0.0313
MPR	0.167978	0.433764	0.387256	0.7145
LRQ	-0.215797	0.472361	-0.456848	0.6669
INF	-0.728016	0.267474	-2.721823	0.0417
EXR	0.431973	0.498292	0.866908	0.4256
R-squared	0.870422	Adjusted R-squared	0.740844	
F-statistic	6.717346	Durbin-Watson stat	2.784288	
Prob(F-statistic)	0.028393			

Source: E-view 7

## DISCUSSION AND CONCLUSION

It was found that there is a relationship between monetary policy on allocation of commercial banks loans and advances to SMEs in Nigeria from 1992-2017. Specifically, the study found monetary policy rate and exchange rate were found to be positively related with commercial bank loans and advances to small and medium scale enterprises. Also, on the other hand, money supply, liquidity ratio and inflation rate negatively affect commercial banks loans and advances to SMEs in Nigeria.

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 SMEs.

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.

Furthermore, the coefficient of determination ( $R^2$ ) 87%, with the value of the Adjusted  $r^2$  as 0.74% indicating that the variation in commercial banks loan and advances to small scale enterprises could be explained by money supply, interest rate, monetary policy rate, liquidity ratio, inflation rate and exchange rate while the remaining 13% is accounted for by the stochastic variable. The result of the study concluded that the overall model is significant. However, effort should be made by government to reduce monetary policy rate thereby making commercial banks loan and advances accessible by small and medium scale enterprises in Nigeria. The study is in consistence with Uwazie and Aina (2015) who concluded that the relevant monetary authorities should apply with caution monetary policy variables to significantly influence the commercial banks loans and advances. The study recommended that friendly and flexible exchange rate, interest rate should be made available to SMEs in Nigeria in order to aid them gain their stand in the business environs. Money supply is very crucial in the business of SMEs, thus, government through monetary authorities should invigorate efforts in circulating money across board of businesses especially SMEs in Nigeria, this is so make their produce competitive in the market arena.

The study has successfully investigated the impact of monetary policies on allocation of loan and advances to Small and medium scale enterprises in Nigeria within the scope of 1992 and 2017. The study leave a time specific gap in literature to be fill, thus, future researcher are implored to research further to 2020 as the case may be for generalization of findings.

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