# Monetary Policy and Financial Intermediation in Nigeria: An Empirical Analysis

# Mazeli, Edith Nkiruka (PhD)

Department of Banking and Finance, Faculty of Management Sciences, Chukwuemeka Odumegwu Ojukwu University, Igbariam, Anambra State. E-mail: en.mazeli@coou.edu.ng

#### Madubuike Kenneth O. (PhD)

Department of Economics, College of Arts & Social Sciences, Evangel University Akaeze, Ebonyi State. E-mail: komadubuike.kenneth@evangeluniversity.edu.ng

#### Onehi, Damian Haruna (PhD)

Department of Banking and Finance, College of Management Sciences, Joseph Sarwuan Tarka University of Agriculture, Makurdi, Benue State. E-mail: onehiharuna2015@gmail.com

### Ejinkonye, Remigius Chinwoke (PhD)

Department of Banking and Finance, College of Management Sciences, Evangel University, Akaeze, Ebonyi State. E-mail: rejinkonye@evangeluniversity.edu.ng (Corresponding author) DOI 10.56201/ijebm.v10.no7.2024.pg198.209

#### Abstract

This paper assessed the effect of monetary policies on financial intermediation in Nigeria. Background: Monetary policy refers to the set of policies intended to control the amount, cost, and value of money in an economy. There seems to be shallow, limited mechanism and inconsistent monetary policies which makes it unable to effectively achieve mobilization and allocation of resources. Also, the desired macroeconomics objectives through monetary policy seems not to have been sustainable enough. Aims: The specific objectives were to assess the effect of: deposit rate on financial intermediation; lending rate on financial intermediation; liquidity ratio on financial intermediation and deposit ratio on financial intermediation. Methods: This study adopted the ex-post facto research design. Annual time series data was obtained from CBN bulletin and analyzed using descriptive statistics, unit roots test and ordinary least square. The independent variables were: deposit rate (DEPRT); lending rate (LENDRT); liquidity ratio (LIGRT); loan to deposit ratio (LDRT), while the dependent variable was commercial banks loans and advances (CBLA). The hypotheses of this study were tested at 5% level of significance. Results: (1) DEPRT had non-significant effect on CBLA; (2) LENDRT had significant effect on CBLA; (3) LIGRT had non-significant effect on CBLA; (4) LDRT had non-significant effect on CBLA. (5) There was no unit root, the probability (f-statistic) was 0.004654 while adjusted  $R^2$ 

value was 45%. **Conclusion:** The Central Bank of Nigeria should re-appraise the effectiveness of her monetary policies and ensure their proper execution to achieve the desired goals in the economy.

*Key words:* Deposit Rate, Lending Rate, Liquidity Ratio, Loan to Deposit Ratio, Loans and Advances.

#### Introduction

Every nation in the world is constantly looking for methods to strengthen its economy. Ensuring the financial system is operating properly is one way to improve the economy. The nation's financial system and economy revolve around the banks. Therefore, the government looks for measures to guarantee a thriving economy by implementing policies through the banks. One tool for efficiently managing the economy through the banks is still monetary policy. Therefore, in order for any country to accomplish its goals, its monetary policy needs to be carefully crafted and implemented. Bamidele et al. (2015) stated that regulatory and supervisory bodies such as the Central Bank have conventionally prioritized a sound, safe, and stable financial system.

In order to accomplish stated or intended macroeconomic goals, the monetary authorities use a combination of discretionary measures to manage and control the money supply in an economy (Aginam & Obi-Nwosu, 2019). Stated differently, it refers to the set of policies intended to control the amount, cost, and value of money in an economy. Chukwu and Ogbonnaya (2020) added that the central bank, acting through deposit money banks, executes policies that guarantee the orderly growth and development of the economy through appropriate adjustments to the money supply in order to maintain monetary stability.

According to Anowor and Okorie (2016), monetary policy is an economic management strategy that promotes long-term, sustainable economic growth and development. Additionally, the role of monetary policy influences macroeconomic goals such as economic development and growth, which include creating jobs, maintaining price stability, increasing GDP, maintaining balance of payments equilibrium, and a host of other goals. It is significant to remember that the efficiency of monetary policy, which is employed to regulate the economy, varies depending on the degree of financial development of the individual nations. The monetary policy tools include: monetary policy rate, interest rates, cash reserve ratios, loan-to-deposit ratios, deposit rates, lending rates, and liquidity ratios. These instruments are employed at various times and in different combinations to drive the objective of the government at any particular time.

Ogiriki and Andabai's study (2014, as cited in Adofu & Ochidi, 2018) stated that financial intermediation has made financial intermediaries the catalyst for growth and development. They further stated that transferring money from surplus economic units to deficit economic units will primarily promote innovative growth. It is the duty of the Central Bank of Nigeria to control the money supply through the employment of a number of monetary policy tools to manage the interest rate, exchange rate and inflation. Research has indicated that nations with robust financial sectors are frequently linked to sustainable economic growth (Aginam & Obi-Nwosu, 2019).

Therefore, in order to guarantee that her monetary policies accomplish the intended goals in contrast to what is currently attainable, Nigeria must work to establish a robust financial system.

Thus, in developed economies such as the United States (US) and certain core European countries, Anowor and Okorie (2016) claimed that there is substantial evidence of the effectiveness of monetary policy innovations on real economic parameters. In support of the aforementioned, Jeff-Anyeneh et al. (2023) noted that monetary policy remains the fundamental tool to be used to accomplish macroeconomic goals as it consists of add-ons that are intended to control or regulate the amount, cost, availability, and direction of credit creation and money supply in an economy.

It is obvious that monetary policy through its influence on economic variables, is unquestionably one of the major drivers of economic growth and development. According to Chukwu and Ogbonnaya (2020), monetary policies were crucial to the development of Nigeria's economy because they controlled and stabilized the amount of money in circulation, which encouraged investment and ultimately led to economic growth. Therefore, if we want to ensure that Nigeria's economic policies are sound and on a growth trajectory, we cannot ignore the mechanism that governs financial intermediation.

It is important to reiterate that banks serve as a bridge between the economy's surplus and deficit sectors. Thus, serving as a channel for the transfer of money from those who have it but do not have immediate need for it to those who have immediate need for it. The function of banks as intermediaries facilitates the transfer of unused funds from individual consumers to the banking industry. An advanced and effective financial system that facilitates the flow of capital throughout the economy is necessary for financial intermediation to occur. Chukwu and Ogbonnaya (2020) in their study stated financial institutions use financial instruments like savings accounts, securities, and loans to mobilize and allocate funds in the money and capital markets, which is the first step in the financial intermediation process.

According to Jeff-Anyeneh et al. (2023), Central Banks can influence the money supply rate, interest rate, security prices, availability of credit, and liquidity creation by commercial banks by using monetary policy as a tool. Since the banking sector is the conduit through which idle funds are made available to the productive sectors of the economy, the role it plays in financial intermediation in the nation cannot be overemphasized. As a result, in order to support the expansion of the Nigerian economy, the government, acting through the Central Bank, must implement sound monetary policy.

Stiglitz's study (2003, as cited in Bamidele et al., 2015) had shown that successful financial intermediation and the effectiveness of monetary policy also depend on a robust, stable, and resilient banking system. Additionally, Bamidele et al. (2015) had noted that it is accurate to say that a stable banking system can strengthen the mechanism for transmitting monetary policy, making monetary policy more potent. Every economy, including Nigeria's, needs a robust and well-developed financial sector in order to experience sustained growth. Therefore, in order to put our nation on the necessary upward trajectory for long-term economic growth, the drive to establish a sound banking system is unavoidable. This is due to the fact that the banking industry acts as a conduit for the transfer of idle funds from surplus units to the deficit units of the economy.

In certain nations, inadequate financial intermediation poses a significant challenge. This may be the result of the shallow and limited mechanism of the financial intermediation process, which makes it unable to effectively mediate in the mobilization and allocation of resources for profitable investment. It has been observed that despite efforts made towards achieving the desired macroeconomics objectives through monetary policy that the results have not been sustainable enough. The forgoing is evidenced in relatively high rate of unemployment, increased poverty rate,

low standard of living, and unacceptable rate of inflation amongst others especially in less developed economies, Nigeria inclusive.

There have been previous studies in this area with varied findings. There is also the need to have a current assessment of the monetary policy and financial intermediation nexus in Nigeria. It is against this backdrop that this work examined the effect of some monetary policy tools on financial intermediation in Nigeria for the period 2000 to 2022.

Hence the following specific objectives were developed.

One: To ascertain the effect of deposit rate on financial intermediation in Nigeria.

Two: To assess the effect of lending rate on financial intermediation in Nigeria.

Three: To examine the effect of liquidity ratio on financial intermediation in Nigeria. Four: To assess the effect of loan to deposit ratio on financial intermediation in Nigeria.

In line with the above specific objectives, the following hypotheses guided the study: One:  $H_0$ : Deposit rate had no significant effect on financial intermediation in Nigeria. Two:  $H_0$ : Lending rate had no significant effect on financial intermediation in Nigeria Three:  $H_0$ : Liquidity ratio had no significant effect on financial intermediation in Nigeria. Four:  $H_0$ : Loan to deposit ratio had no significant effect on financial intermediation in Nigeria The remaining sections of this study are classified as follows: literature review; methodology, data presentation, findings, discussions, conclusion and recommendations.

#### Literature review

#### Conceptual review

Adegbemi (2023) defined monetary policy as the set of policies intended to control the amount, cost, and value of money in an economy in order to maintain the appropriate level of economic activity. In order to maintain stable prices and steady economic growth within an economy, the monetary authority regulates the course and flow of monetary policy and credit facilities. Monetary policy have also been seen as the use of monetary instruments to regulate or control the amount, cost, availability, and direction of money and credit in an economy (Yimka et al., 2020). Furthermore, Ifurueze (2022) defined monetary policy as a set of actions intended to control the amount, cost, and value of money in an economy. Ubi et al.'s study (2012, as cited in Aginam & Obi-Nwosu, 2019) stated that monetary policy is a branch of macroeconomics that deals with the use of monetary instruments intended to control the value, supply, and cost of money in an economy in accordance with the anticipated level of economic activity.

Through the banking industry, idle funds are made available to the productive sectors, making it easier to use surpluses in the economy to create jobs and advance economic welfare. Monetary policy, according to Ndugbu and Okere (2015), is therefore a key tool for stabilizing the economy. In view of the forgoing, the banking industry stands out as a conduit for helping to harness and advance a country's economic advancement. One of the government's economic strategies, implemented through the nation's central bank, is monetary policy, which aims to create macroeconomic stability and stimulate economic growth (Hillary et al., 2022). Also, controlling the value of money in circulation have been established as the constant goal of the monetary authorities, namely, the Central Bank of Nigeria (CBN).

Chukwu and Ogbonnaya (2020) noted that intermediation is the process of moving savings for a value from one sector of the economy to another which could be used for investments or consumption. Therefore, it is essential that this financial intermediation process encourage

IIARD – International Institute of Academic Research and Development

investment in areas that lack funding. An organization that serves as a middleman between two parties in order to improve economic activities by transferring capital from savers to investors is known as a financial intermediary (Okoro et al., 2018). According to Yusifzada and Mammadova (2015), effective financial system intermediation therefore facilitates the transfer of funds from a group with excess capital to a group in need of funds.

#### Theoretical review

Liquidity theory for bank operations: According to liquidity theory, a bank can experience bank runs if it cannot accommodate its customers' urgent withdrawal requests, which in turn causes a decline in deposits and credit. In this instance, banks that are susceptible to bank runs endanger the stability of the banking system. Consequently, it is imperative that central banks worldwide consistently implement policies that facilitate banks' ability to fulfill the withdrawal requests of their depositors (Aginam & Obi-Nwosu, 2019).

Additionally, Irving Fisher's Quantity Theory of Money from the 1890s, which centered on the bimetallism controversy, is pertinent to this research. According to the quantity theory of money, the primary factor influencing the level of prices or the value of money is the amount of money in circulation. Any variation in the amount of money results in a precisely proportionate variation in the level of prices. Irving Fisher once said, " 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 (Aginam & Obi-Nwosu, 2019).

# Empirical review

Jeff-Anyeneh et al. (2023) studied how DMB performance is impacted by the monetary policy rate, cash reserve ratio, liquidity ratio, and loans to deposit ratio. The Central Bank of Nigeria's statistical bulletin from 2021 provided the time series data for this study, which covered the years 1992 to 2021. The Granger Causality Test and the Ordinary Least Square (OLS) regression method were used to analyze the data. Pre-estimation tests were carried out, and the results demonstrated that the banks' asset bases had improved significantly when they sent more reserve requirements to the Central Bank of Nigeria. Also, the results demonstrated that the liquidity ratio actually had a positive and significant impact on the asset growth of Nigerian banks.

Didigu et al. (2022) used quarterly data from 2007Q1 to 2021Q4 to examine how monetary policy affects the stability of the Nigerian banking sector. The autoregressive distributed lag (ARDL) and bounds testing method for co-integration were used in their study. They found out that monetary policy in Nigeria and the stability of the banking sector are related over the long-run. Moreover, it is discovered that the cash reserve ratio, liquidity ratio, and monetary policy rate all improve the stability of the banking industry.

Ifurueze (2022) evaluated the effect of monetary policy instruments on the financial sector in Nigeria. The researcher employed Augmented Dickey Fuller unit roots test in preliminary testing, and for data analysis, the Autoregressive Distributive Lag (ARDL) was employed. The study's finding showed a long-term correlation between the output of financial institutions and monetary policy tools.

Yimka et al. (2020) examined monetary policy and financial performance of deposit money banks in Nigeria. The Central Bank of Nigeria Statistical Bulletin was the source of data covering

IIARD – International Institute of Academic Research and Development

1984 to 2018. The independent variables used were: loan to deposit ratio, cash reserve ratio, lending rate and liquidity ratio, while dependent variable was the net-worth and total credits of deposit money banks. The Autoregressive Distributed Lag and Ordinary Least Square methods were applied. They found out that long-term effects on the log of net-worth were not statistically significant for any of the monetary policy variables. However, the log of net-worth in the current year was significantly impacted in the short-term by changes in the liquidity ratio, loans to deposit ratio, and cash reserve ratio for prior years.

Chukwu and Ogbonnaya (2020) examined the effect of monetary policy on financial intermediation in Nigeria. Secondary data covering the years 1988–2018 were gathered from the Central Bank of Nigeria statistical bulletin. The study used the VECM with the dependent variable being Total Domestic Bank Credit and independent variables being Monetary Policy Rate, Cash Reserve Ratio, Loan to Deposit Ratio and Liquidity Ratio. They found out that monetary policy in Nigeria has little bearing on intermediation. Also, there exists a unidirectional causal relationship between monetary policy and intermediation in Nigeria as demonstrated by the Granger causality test.

Aginam and Obi-Nwosu (2019) examined how Nigerian banks performed in relation to monetary policy for the period 1987 to 2017. The independent variables of interest rate, monetary policy rate, liquidity ratio, and broad money supply were regressed on the dependent variable - return on equity (ROE). They used secondary data and employed ex-post facto research design. The Ordinary Least Square (OLS) and the Augmented Dicker Fuller and Philip Perron tests for unit roots were done. The study's findings showed that while interest rates have a negative and negligible impact on return on equity (ROE), the monetary policy rate, liquidity ratio, and broad money supply all have positive and significant effects.

### Method

The *ex-post facto* research method was adopted. Multiple regression analysis was used which measures the association between a given dependent variable and two or more independent variables in a given regression function. This OLS technique helped to find out if the independent variables coefficient had a positive or negative sign and if the probability value is statistically significant or not. The descriptive statistics was used to ascertain the mean, median, standard deviation, skewness amongst others on the variables used in the study. Test for stationarity of the data was done using the ADF technique.

The variables used in this study to proxy monetary policy were deposit rate, lending rate, liquidity ratio and loan to deposit ratio, while commercial banks loans and advances was used to proxy financial intermediation. The *a-priori* expectation is that the independent variables should have significant effect on the dependent variable. The decision rule is to accept the null hypothesis where the probability value is greater than 0.05 otherwise reject

This relationship can be expressed as:  $Y_t = b_o + b_1x_1 + b_2x_2 + b_3x_3 + \dots B_tx_t + e_t$ Where: Y = dependent variable  $b_o = \text{intercept}$   $x_1, x_2, x_3 \text{ are the independent variables}$   $e_t = \text{random error term}$   $b_0$ ,  $b_1$ ,  $b_2$ ,  $b_3$  are the parameters of the model

This study used the model:

CBLA = f(DEPRT, LENDRT, LIQRT, LDRT)

The above is estimated as follows:

 $CBLA = b_0 + b_1DEPRT + b_2 LENDRT + b_3 LIQRT + b_4 LDRT + e_t$ 

CBLA = Commercial banks loans and advances

DEPRT = Deposit rate

LENDRT = Lending rate

LIQRT = Liquidity ratio

LDRT = Loan to deposit ratio

Data presentation

Table i:Data on deposit rate, lending rate, liquidity ratio, loan to deposit ratio and<br/>commercial banks loans and advances.

| VEAD | DEDDT | ΙΕΝΙΟΦΤ | ιιορτ       | IDDT  | CBLA<br>N' Billion |
|------|-------|---------|-------------|-------|--------------------|
| 2000 | 5 20  | 17 08   |             | 51.00 | 509.20             |
| 2000 | 5.29  | 17.98   | <u>64.1</u> | 51.00 | 508.30             |
| 2001 | 5.49  | 18.29   | 52.9        | 65.63 | /96.16             |
| 2002 | 4.15  | 24.85   | 52.5        | 62.78 | 954.63             |
| 2003 | 4.11  | 20.71   | 50.9        | 61.85 | 1,210.03           |
| 2004 | 4.19  | 19.18   | 50.5        | 68.63 | 1,519.24           |
| 2005 | 3.83  | 17.95   | 50.2        | 70.80 | 1,976.71           |
| 2006 | 3.14  | 17.26   | 81.42       | 96.82 | 2,524.30           |
| 2007 | 3.55  | 16.94   | 41.56       | 83.26 | 4,813.49           |
| 2008 | 2.84  | 15.14   | 37.72       | 86.91 | 7,799.40           |
| 2009 | 2.68  | 18.99   | 26.39       | 84.30 | 8,912.14           |
| 2010 | 2.21  | 17.59   | 27.39       | 52.29 | 7,706.43           |
| 2011 | 1.41  | 16.02   | 42.02       | 44.77 | 7,312.73           |
| 2012 | 1.70  | 16.79   | 49.72       | 42.31 | 8,150.03           |
| 2013 | 2.17  | 16.72   | 46.23       | 37.56 | 10,005.59          |
| 2014 | 3.38  | 16.55   | 38.27       | 63.61 | 12,889.42          |
| 2015 | 3.58  | 16.85   | 42.35       | 69.58 | 13,086.20          |
| 2016 | 3.75  | 16.87   | 45.95       | 79.95 | 16,117.29          |
| 2017 | 4.13  | 17.56   | 54.79       | 72.84 | 15,740.59          |
| 2018 | 4.07  | 19.33   | 65.04       | 60.16 | 15,134.20          |
| 2019 | 3.95  | 15.53   | 104.20      | 58.73 | 17,187.77          |
| 2020 | 3.22  | 12.32   | 67.60       | 60.33 | 20,373.49          |
| 2021 | 1.69  | 11.48   | 61.20       | 60.48 | 24,378.19          |
| 2022 | 2.34  | 12.34   | 54.93       | 61.70 | 29,445.87          |

Source: CBN statistical bulletin, 2022.

| Table ii:    | Descriptive statistics |          |          |          |          |  |
|--------------|------------------------|----------|----------|----------|----------|--|
|              | DEPRT                  | LENDRT   | LIQRT    | LDRT     | CBLA     |  |
| Mean         | 3.341397               | 17.09667 | 52.51195 | 65.05523 | 9936.618 |  |
| Median       | 3.545000               | 16.93750 | 50.47500 | 62.77500 | 8150.030 |  |
| Maximum      | 5.490000               | 24.85000 | 104.2024 | 96.81702 | 29445.87 |  |
| Minimum      | 1.410541               | 11.48313 | 26.39276 | 37.55947 | 508.3022 |  |
| Std. Dev.    | 1.086672               | 2.817023 | 16.90125 | 14.64482 | 8072.293 |  |
| Skewness     | -0.015663              | 0.284731 | 1.213022 | 0.197331 | 0.698494 |  |
| Kurtosis     | 2.431801               | 4.446168 | 5.201399 | 2.711530 | 2.759041 |  |
| Jarque-Bera  | 0.310339               | 2.315035 | 10.28468 | 0.229016 | 1.925901 |  |
| Probability  | 0.856270               | 0.314265 | 0.005844 | 0.891805 | 0.381765 |  |
| Sum          | 76.85213               | 393.2233 | 1207.775 | 1496.270 | 228542.2 |  |
| Sum Sq. Dev. | 25.97883               | 174.5836 | 6284.352 | 4718.355 | 1.43E+09 |  |
| Observations | 23                     | 23       | 23       | 23       | 23       |  |

#### **Presentation of results**

The above table ii displayed the descriptive statistical behaviour of all the parameters that were subjected to estimation in this study. The descriptive statistic above showed the mean, median, maximum value, minimum value, standard deviation, skewness, kurtosis, jarque-bera, probability, sum sq dev and number of observations of the variables used in the study.

Table iii: Unit root test extracts

| Null hypothesis:      | H0= Series has a unit root  |
|-----------------------|-----------------------------|
| Alternate hypothesis: | U1- Sorias has no unit root |

Decreasion anterest

| Variables | ADF STAT  | 5% critical | Inference | p-value | Decision    |
|-----------|-----------|-------------|-----------|---------|-------------|
| DEPRT     | -3.994555 | -3.012363   | I(1)      | 0.0064  | Reject null |
| LENDRT    | -5.168463 | -3.012363   | I(1)      | 0.0005  | Reject null |
| LIQRT     | -5.677462 | -3.012363   | I(1)      | 0.0002  | Reject null |
| LDRT      | -3.689859 | -3.029970   | I(0)      | 0.0134  | Reject null |
| CBLA      | -5.137659 | -3.020686   | I(2)      | 0.0006  | Reject null |

Source: Researcher's extract from the unit root tests results using ADF methods (Eviews10).

The above table iii showed that there is no unit root for LDRT at level, DEPRT, LENDRT and LIQRT while that of CBLA was at 2<sup>nd</sup> difference. Since the probability values are less than 5% significant level, the series are stationary and suitable for estimation using regression technique of analysis. Table in.

| Table iv: | Regression ouip | ui         |             |         |             |
|-----------|-----------------|------------|-------------|---------|-------------|
| Variables | Coefficient     | Std. error | t-statistic | p-value | Decision    |
| DEPRT     | -828.1594       | 1566.49    | -0.528672   | 0.6035  | Accept null |
| LENDRT    | -1871.735       | 567.529    | -3.298042   | 0.0040  | Reject null |
| LIQRT     | 53.94512        | 86.20498   | 0.625777    | 0.5393  | Accept null |
| LDRT      | -17.09057       | 91.41065   | -0.186965   | 0.8538  | Accept null |

Source: Researcher's extract from the regression table (Eviews10).

The regression output showed prob(F-statistic) value of 0.004654 which is less than 5% significant level used in the study, hence indicating that the model used is statistically fit. On the other hand, the  $R^2$  had a value of 0.548208 while Adjusted  $R^2$  value was 0.447810. The forgoing showed that the independent variables in the study explained 45% of changes in the dependent variable in absolute terms.

## Test of hypotheses

Hypothesis one:  $H_01$ : DEPRT had no significant effect on CBLA in Nigeria. The DEPRT probability value is 0.6035 which is greater than 5% level of significance. The null hypothesis is therefore accepted and it is concluded that DEPRT had non-significant effect on CBLA in Nigeria for the period reviewed.

Hypothesis two: H<sub>0</sub>2: LENDRT had no significant effect on CBLA in Nigeria.

The LENDRT probability value is 0.0040 which is less than 5% level of significance. The null hypothesis is therefore rejected and it is concluded that LENDRT had significant effect on CBLA in Nigeria for the period reviewed.

Hypothesis three: H<sub>0</sub>3: LIGRT had no significant effect on CBLA in Nigeria.

The LIGRT probability value is 0.5393 which is greater than 5% level of significance. The null hypothesis is therefore accepted and it is concluded that LIGRT had non-significant effect on CBLA in Nigeria for the period reviewed

Hypothesis four: H<sub>0</sub>4: LDRT had no significant effect on CBLA in Nigeria.

The LDRT probability value is 0.8538 which is greater than 5% level of significance. The null hypothesis is therefore accepted and it is concluded that LDRT had non-significant effect on CBLA in Nigeria for the period reviewed.

# Discussion of findings:

The *a-priori* expectation is that these monetary policy tools should have significant effect on the growth of commercial banks loans and advances so as to propel economic growth in Nigeria. The findings showed that: DEPRT had a negative and non-significant effect on CBLA (coefficient = -828.1594; probability = 0.6035). Also, LENDRT had a negative but significant effect on CBLA (coefficient = -1871.735; probability = 0.0040). Furthermore, LIGRT had a positive but nonsignificant effect on CBLA (coefficient = 53.94512; probability = 0.5393). Finally, LDRT had a negative and non-significant effect on CBLA (coefficient = -17.09057; probability = 0.8538) Hence, one variable (LIQRT) had positive relationship while one variable (LENDRT) had significant effect. This could imply that the monetary policies are either contradicting one another, poorly made, non-implementable or not monitored for proper implementation. Also, the adjusted R<sup>2</sup> value of 45% showed that over 50% of other variables are affecting commercial banks loans and advances in Nigeria.

It is therefore imperative that the Central Bank of Nigeria must look at other factors affecting its monetary policy formulation and eventual execution. This will help her ensure that the monetary policies made achieve the desired goals. These goals will includes driving up bank deposits for eventual increase in commercial banks loans and advances and consequent growth of the Nigerian economy.

The above finding of a negative effect of deposit rate (DEPRT) agrees with the findings of Aginam and Obi-Nwosu (2019) and Ndugbu and Okere (2015). However, its non-significant effect found in this work agrees with the finding of Aginam and Obi-Nwosu (2019) but differs from that of Ndugbu and Okere (2015) who found significant effect.

The above finding of a negative effect of lending rate (LENDRT) disagrees with the findings of Jeff-Anyeneh et al. (2023), and Ndugbu and Okere (2015) who found a positive coefficient. Also, its significant effect as found in this study differs from the non-significant effect found by Jeff-Anyeneh et al. (2023), and Ndugbu and Okere (2015).

The above finding of a positive effect of liquidity ratio (LIQRT) is in agreement with the findings of Aginam and Obi-Nwosu (2019), Jeff-Anyeneh et al. (2023), and Ifurueze (2022) but differ from Ndugbu and Okere (2015) who found a negative coefficient. The non-significant effect of liquidity ratio as found in this work agrees with Ndugbu and Okere (2015) but disagrees with the findings of Aginam and Obi-Nwosu (2019), Jeff-Anyeneh et al. (2023), and Ifurueze (2022).

#### Conclusion

This study have shown that the monetary policies made are not contributing to financial intermediation as expected. The forgoing is evidenced in the result of only one of the variables having positive effect while three have negative effect and one having significant effect while three have non-significant effect. Also, the adjusted  $R^2$  having only 45% which shows that the variables explained less than 50% of changes in financial intermediation in Nigeria. The model was however statistically fit with prob(f-statistic) value of 0.004654.

The Central Bank of Nigeria should therefore re-appraise the effectiveness of her monetary policies. The right policies should be made and as well properly executed to ensure attainment of the desired goals in the economy.

#### Recommendations

- 1) The deposit rate should be slightly adjusted upwards. This will hence entice people keeping cash outside the banking industry to patronize banks hence making more funds available for financial intermediation in Nigeria.
- 2) The lending rate is on the high side and not borrowers friendly hence people are discouraged from borrowing. This rate need to be reduced to encourage people to borrow which can reverse the negative effect it has on commercial banks loans and advances.
- 3) The liquidity ratio need to be increased by the CBN. This will help banks have more funds for intermediation and can help reverse its negative and non-significant effect on financial intermediation.
- 4) The loan to deposit ratio should be enhanced by improving on the lending rate and deposit rate as stated above. This will help reverse the negative and non-significant effect of loan to deposit ratio on financial intermediation in Nigeria.

#### References

- Adegbemi, B. O. (2023). Macroeconomic dynamics and the manufacturing output in Nigeria. *Mediterranean Journal of Social Sciences*, 9(2), 13-25.
- Adofu, I., & Ochidi, E. A. (2019). Monetary policy, financial intermediation and household debt in Nigeria. *Lafia Journal of Economics and Management Sciences*, 4(2), 71-88.
- Aginam, C. J., & Obi-Nwosu, V. O. (2019). Effect of monetary policy on the performance of deposit money banks in Nigeria: 1987-2017. *Zik Journal of Multidisciplinary Research*, 2, 58-67.
- Anowor, O. F., & Okorie, G. C. (2016). A re-assessment of the impact of monetary policy on economic growth: Study of Nigeria. *International Journal of Developing and Emerging Economies*, 4(1), 82-90.
- Bamidele, A. J., Musa, L., Bala-Keffi, O. D., & Imam, S. (2015). Effect of monetary policy on the banking system stability in Nigeria. *CBN Economic and Financial Review*, *53*(2), 1-18.
- Chukwu, K. C., & Ogbonnaya-Udo, N. (2020). Effect of monetary policy on the financial intermediation in Nigeria. *Asian Journal of Advanced Research and Reports*, *13*(3), 22-36. Doi:10.9734/AJARR/2020/v3i330309.
- Didigu, C., Joshua, N. J., Okon, J. I., Eze, A. O., Gopar, J. Y., Oraemesi, C. N., Udofia, B. U., Yisa, D. N., Ejinkonye, J. C., & Ette, V. E. (2022). Monetary policy and banking sector stability in Nigeria. *CBN Journal of Applied Statistics*, 13(1), 1-26. Doi:10.33429/cjas.13122.1/9.
- Hillary, C. E., Imo, G. I., & Uche, B. (2018). Monetary policy transmission and industrial sector growth: Empirical evidence from Nigeria: *Journal of International Financial Markets*, *Institutions & Money*, 4(3), 18-176.
- Ifurueze, P. C. (2022). Monetary policy instruments and performance of financial sector in Nigeria. *International Journal of Business & Law Research*, 10(3), 61-76.
- Jeff-Anyeneh, S. E., Anachedo, C. K., Okonkwo, J. J., & Udoye, O. N. (2023). Effects of monetary policy on the financial performance of deposit money banks in Nigeria. *African Banking and Finance Review Journal*, 1(1), 54-67.
- Ndugbu, M. O., & Okere, P. A. (2015). Monetary policy and the performance of deposit money banks The Nigerian experience. *European Journal of Business and Management*, 7(17), 65-73.

- Okoro, O. E. U., Manasseh, C. O., Abada, F. C., Nzidee, W. A., Okeke, A. C., & Onwumere, J, U, J. (2018). Financial intermediation and monetary policy effectiveness in Nigeria. *International Review of Management and Marketing*, 8(6), 53-61. Doi:https://doi.org/1032479/irmm.7273.
- Yusifzada, L., & Mammadova, A. (2015). Financial intermediation and economic growth. William Davidson Institute. Working Paper Number No. 1091.
- Yimka, S. A. A., Ezekiel, O., & Olusegun, A. A. (2020). Monetary policy and financial performance of deposit money banks in Nigeria: *Asian Social Science*, *16*(5), 1-20.