

Monetary Policy and Trade Balance in Nigeria

Edokobi, Tonna David PhD¹; Okpala, Ngozi Eugenia²; Okoye, Nonso John³

¹Department of Business Administration, Nnamdi Azikiwe University (NAU), Awka, Nigeria

²Department of Accountancy, Nnamdi Azikiwe University (NAU), Awka, Nigeria

³Department of Banking and Finance, Nnamdi Azikiwe University (NAU), Awka, Nigeria

ABSTRACT

Nigeria apex bank - Central Bank of Nigeria (CBN) - has continued to battle with the job of reviving the ailing economy and putting it on the path of growth. The economy has witnessed unprecedented job loss, rising poverty level, accelerating inflation, sluggish economic growth and disequilibrium in the balance of trade. The study therefore examine the effect of monetary policy on trade balance in Nigeria. Specifically the study ascertained the extent to which inflation, demand deposit, liquidity ratio, exchange rate and interest rate have influenced trade balance in Nigeria using an econometric regression model of the Ordinary Least Square (OLS). From the result of the OLS, it is observed that monetary policy rate, demand deposit, liquidity ratio and exchange rate have a significant positive impact on foreign trade in Nigeria. This means that increases in monetary policy rate, demand deposit, liquidity ratio and exchange rate, will lead to increase in foreign trade in Nigeria. On the other, inflation rate and interest rate has a significant negative impact on foreign trade in Nigeria, meaning that as inflation rate and interest rate increases, will be bring about a decline in foreign trade in Nigeria. Based on the findings of this study, the study recommends that the government should employ a contractionary monetary policy to fight inflation by reducing the money supply in the country through decreased bond price. inflation, demand deposit, liquidity ratio, exchange rate and interest rate have influenced trade balance in Nigeria. The government should intervene in the foreign exchange market in order to build reserves for themselves or provide them to the bank to help stabilize the exchange rate. The government should strive to improve trade performance in the short and long run. They should also reduce government spending and tax capital inflow.

KEYWORDS: *Monetary Policy, Trade Balance, Inflation, Demand Deposit, Liquidity Ratio, Exchange Rate and Interest Rate*

1. INTRODUCTION

Maintaining economic stability and inducing growth has remain one of the major objectives of the government in both developed and developing countries. Monetary and fiscal policy instruments are used to achieve these very objectives. However, the focus of this study is on monetary policy which is used by the central bank of a country to address the issues of interest rates and the supply of money in circulation. This is aimed at meeting macroeconomic objectives such as controlling inflation, consumption, growth, and liquidity. Inimino, Akpan, Otubu and Alex (2019) posits that the quantity and cost of

money supply is regulated by monetary policy and this is deliberately design by the government. It involves measures designed to control the volume, cost, availability and direction of money and credit in an economy to achieve some specified macroeconomic policy objectives. Apart the from the money supply and credit conditions objectives of the monetary policy, it also aims at increasing the macroeconomic objective of stabilizing balance of payments equilibrium and also to checks unwanted trends in an economy. These unwanted trends in the

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economy may include disequilibrium in the balance of payments (Odungweru & Ewubare (2020)

Balance of trade (BOT) refers to the difference between the value of a country's exports and the value of a country's imports for a given period. Balance of trade is the largest component of a country's balance of payments (BOP) and maintaining a stable balance is the prerogative of the Central Bank of Nigeria. According Proso, Inaya and Okoye (undated) the Monetary policy of the Central Bank of Nigeria include: achievement of full employment, achievement on economic growth or development, achievement of price stability (in the domestic front), achievement of balance of payment equilibrium, achievement of tolerable social, political and other national objectives that make the population feel that they have not been cheated by the economic system. regrettably, trade balance in Nigeria has remained under marked stress in recent time following the outbreak of COVID-19 pandemic-induced lockdown and the collapse in the oil prices. The stagnated oil price which has continued to stagger has triggered an accelerating double-digit inflation and tight FX liquidity consequently weighing down on household purchasing power and general business operations. This has resulted to mass unemployment, inflation, sluggish economic growth or disequilibrium in the balance of trade and thus defiling the very aim and objectives of the Central Bank of Nigeria (CBN) (Nwanosike, Uzoechina, Ebenyi & Ishiwu, 2017; Nizamani, Karim, Zaidi & Khalid (undated).

Statement of the Problem

Nigeria apex bank - Central Bank of Nigeria (CBN) - has continued to battle with job reviving the ailing economy and putting it on the path of growth. The economy has witnessed unprecedented job loss, rising poverty level, accelerating inflation, sluggish economic growth and disequilibrium in the balance of trade. Over the years, a number of approaches have adopted to put the system under serious check but no sustainable result have been achieved. Two major approaches have been adopted in navigating the monetary policy in Nigeria before and after 1986. The first approach focused on direct monetary controls, while the second approach relies on market mechanisms. Udude (2015) posits that a review of Nigeria's monetary policy performance before 1986 shows that the economic environment that guided monetary policy was characterized by the dominance of the oil sector and over-dependence on the external sector in order to maintain price stability and a healthy balance of payments position. The monetary management authority depended on the use of direct monetary instruments such as credit ceilings,

selective credit controls, administered interest and exchange rates, as well as the prescription of cash reserve requirements and special deposits. The use of market-based instruments was not feasible at this point because of the underdeveloped nature of the financial markets and the deliberate restraint on interest rate. The situation have become more constricting as the country continued to witness trade disequilibrium with the emergence of a market-oriented financial system for effective mobilization of financial savings and efficient resource allocation and the introduced a monetary framework tagged "Monetary policy rate"(MPR), with the ultimate goal of achieving stability in the value of the domestic currency through the stability in short term interest rates around the "operating target". The heightening level of disequilibrium in Nigeria's trade balance despite different measures adopted to correct the anomaly warrants an empirical investigation of this nature.

Objectives of the Study

The main objective of the study is examine the effect of monetary policy on trade balance in Nigeria. Specifically the study intends to ascertain the extent to which inflation, demand deposit, liquidity ratio, exchange rate and interest rate have influenced trade balance in Nigeria.

2. METHODOLOGY

Theoretical Framework

The AK model which is the simplest endogenous growth model will form the study theoretical framework. This theory was introduced by Paul Romer in 1986 where he tried to explain the growth process in different manner. The model gives a constant-saving-rate of endogenous growth and assumes a constant, exogenous, saving rate. It models technological progress with a single parameter (usually A). It uses the assumption that the production function does not exhibit diminishing returns to scale to lead to endogenous growth.

The AK model works on the property of absence of diminishing returns to capital. The simplest form of production function with non-diminishing return is:

$$Y = AK \quad \dots \quad \dots \quad \dots \quad \dots \quad (1)$$

Where; "A" is a positive constant that reflects the level of the technology.

"K" is capital (broad sense to include human capital).

The model assume constant exogenous saving rate and fixed level of technology. The stickiest assumption of this model is that production function does not include diminishing returns to capital. This

means that with this strong assumption, the model can lead to endogenous growth.

The AK model production function is a case of a Cobb-Douglas function with constant returns to scale.

$$Y = AK^\alpha L^{1-\alpha} \quad \dots \quad \dots \quad \dots \quad (2)$$

This equation shows a cob-Douglas function where “Y” represents the total production in an economy. “A” represents total factor productivity, “K” is capital, L is labour and the parameter α measures the output elasticity of capital.

Model Specification

The essence of economic modeling is to represent the phenomenon under investigation in such a way to enable the researcher to attribute numerical values to the concept.

Using the knowledge gained from the above theoretical framework, the study examined the impact of monetary policy on economic growth in Nigeria by modifying equation 2 as

$$Y = TK^\alpha (hL)^\beta \quad \dots \quad \dots \quad \dots \quad (3)$$

Where, Y = Output level or economic growth;

K = Stock of physical capital;

h = Level of Capital;

L = Labour, measured by number of workers;

T = Level of Trade openness;

α = Elasticity of capital input with respect to output;

β = Elasticity of labour input with respect to output.

Econometrically, the model is specified as follows:

$$Y = MK^\alpha (hL)^\beta + \mu_i \quad \dots \quad \dots \quad \dots \quad (4)$$

Thus, the difference between 3.2 and 3.3 is that the study changed the constant “A” which is total factor productivity to “M” which is the monetary policy to suit the study model. Thus, the study incorporate monetary policy rate, inflation, demand deposit, liquidity ratio, exchange rate and interest rate as the explanatory variables, while foreign trade measured by sum of export and imports of goods and services measured as a share of gross domestic product is used as the dependent variable. Thus, the model equation for this study is specified thus:

The functional form of the model for this study is:

$$FOT = f(MPR, INF, DMD, LQR, EXR, INT) \dots (5)$$

The mathematical form of the model for this study is:

$$FOT = \beta_0 + \beta_1 MPR + \beta_2 INF + \beta_3 DMD + \beta_4 LQR + \beta_5 EXR + \beta_6 INT \quad \dots \quad \dots \quad (6)$$

The econometric form of the model for this study is:

$$FOT = \beta_0 + \beta_1 MPR + \beta_2 INF + \beta_3 DMD + \beta_4 LQR + \beta_5 EXR + \beta_6 INT + \mu_i \quad \dots \quad (7)$$

Where;

FOT = Foreign trade proxy by sum of export and imports of goods and services measured as a share of gross domestic product for non-oil goods

MPR = Monetary policy proxied by monetary policy rate

INF = Inflation proxied by inflation rate

DMD = Demand deposit

LQR = Liquidity ratio

EXR = Exchange rate

INT = Interest rate

β_0 = the intercept of the model

$\beta_1 - \beta_6$ = parameters of the regression coefficients

μ_i = disturbance error term

Method of Data Analysis

The economic technique employed in the study is the ordinary least square (OLS). This is because (i) the OLS estimators are expressed solely in terms of the observable (i.e. sample) quantities. Therefore, they can be easily computed. (ii) They are point estimators; that is, given the sample, each estimator will provide only a single value of the relevant population parameter. (iii) The mechanism of the OLS is simple to comprehend and interpret. (iv) Once the OLS estimates are obtained from the same data, the sample regression line can be easily obtained. All data used in this research are secondary time series data which are sourced from the Central Bank of Nigeria (CBN) annual statistical bulletin and World Bank Data Bank.

3. DATA PRESENTATION AND ANALYSIS

In this section data were analyzed and results presented. The OLS results of the model are presented and the parameter estimates subjected to some economic a priori, statistical and econometric tests. The estimation was carried out using the E-views software.

Summary of Stationary Unit Root Test

Establishing stationarity is essential because if there is no stationarity, the processing of the data may produce biased result. The consequences are unreliable interpretation and conclusions. The study test for stationarity using Augmented Dickey-Fuller (ADF) tests on the data. The ADF tests are done on level series, first and second order differenced series. The decision rule is to reject null hypothesis if the ADF statistic value exceeds the critical value at a chosen level of significance (in absolute terms). The result of regression is summarized and shown in Table 1 below.

Table 1: Summary of ADF Unit Root Test Results

Variables	Level		1 st Difference		2 nd Difference	
	No Trend	With Trend	No Trend	With Trend	No Trend	With Trend
FOT	0.919813	-2.902840	-5.225492	-5.645979	-7.747373	-7.617842
MPR	-0.106433	-2.157083	-6.215667	-6.071775	-8.306953	-7.922807
INF	-1.274825	-2.644868	-5.108298	-4.930862	-7.468588	-7.232872
DMD	-0.222047	-2.819788	-5.355000	-5.117087	-8.698824	-8.289144
LQR	0.459944	-1.926101	-4.637792	-4.571781	-8.117355	-7.782613
EXR	0.631011	-1.487996	-4.529186	-4.476082	-7.054238	-6.814367
INT	-0.573475	-2.670615	-6.086221	-7.307698	-12.37888	-11.57537
@1%	-2.653401	-4.339330	-2.656915	-4.374307	-2.664853	-4.394309
@5%	-1.953858	-3.587527	-1.954414	-3.603202	-1.955681	-3.612199
@10%	-1.609571	-3.229230	-1.609329	-3.238054	-1.608793	-3.243079

Source: Researcher compilation from E-view

Evidence from unit root table above shows that all the study or model variables are not stationary at level difference but stationary at first difference. Since the decision rule is to reject null hypothesis if the ADF statistic value exceeds the critical value at a chosen level of significance (in absolute terms), and accept stationarity when ADF statistics is greater than criteria value, the ADF absolute value of each of these variables is greater than the 1%, 5% and 10% critical value at their first difference but less than 5% critical value in their level form. Therefore, the study concludes that FOT, MPR, INF, DMD, LQR, EXR, and INT are all stationary at their first difference integration.

Summary of Johansen Cointegration Test

Cointegration means that there is a correlation among the variables. Cointegration test is done on the residual of the model. Since the unit root test shows that none of the variable is stationary at level, $I(0)$ rather they integrated at their first difference $I(1)$, the study therefore test for cointegration among these variables. The result is presented in the tables 2 below for Trace and Maximum Eigenvalue cointegration rank test respectively.

Table 2: Summary of Johansen Cointegration Test

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.941388	205.5047	125.6154	0.0000
At most 1 *	0.872083	131.7473	95.75366	0.0000
At most 2 *	0.785958	78.28149	69.81889	0.0090
At most 3 *	0.576590	48.20029	37.85613	0.0033
At most 4 *	0.332655	30.85550	22.79707	0.0094
At most 5 *	0.176691	15.339844	11.49471	0.0077
At most 6	0.010895	0.284819	3.841466	0.5936
Trace test indicates 6 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.941388	73.75741	46.23142	0.0000
At most 1 *	0.872083	53.46577	40.07757	0.0009
At most 2 *	0.785958	40.08120	33.87687	0.0080
At most 3 *	0.576590	27.34478	22.58434	0.0032
At most 4 *	0.332655	21.51566	10.13162	0.0052
At most 5	0.176691	5.055025	14.26460	0.7349
At most 6	0.010895	0.284819	3.841466	0.5936
Max-eigenvalue test indicates 5 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Source: Researchers computation

Table 2 indicated that trace have six cointegrating variables in the model while Maximum Eigenvalue indicated also that there is five cointegrating variables. Both the trace statistics and Eigen value statistics reveal that there is a long run relationship between the variables. This will prevent the generation of spurious regression results. Hence, the implication of this result is that there is a long run relationship between trade balance and other variables used in the model.

Presentation of Result

The regression model is restated and the regression result follows:

Table 3: Summary of Regression Results

Dependent Variable: FOT				
Method: Least Squares				
Sample: 1991 2020				
Included observations: 38				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	29.33829	2.068266	4.385491	0.0036
MPR	5.577988	1.401279	3.398064	0.0046
INF	-5.051667	1.804493	-5.279949	0.0001
DMD	25.87279	1.311272	3.973106	0.0018
LQR	15.69833	4.039957	2.988577	0.0095
EXR	24.33086	4.441833	5.477663	0.0000
INT	-14.31595	1.015412	-3.899300	0.0027
R-squared	0.821270	F-statistic		16.08256
Adjusted R-squared	0.770204	Prob(F-statistic)		0.000001
S.E. of regression	12.44293	Durbin-Watson stat		1.893260

Source: Researcher computation

Evaluation of Findings

To discuss the regression results as presented in Table 3, the study employ economic a priori criteria, statistical criteria and econometric criteria.

Evaluation Based on Economic A Priori Criteria

This subsection is concerned with evaluating the regression results based on a priori (i.e., theoretical) expectations. The sign and magnitude of each variable coefficient is evaluated against theoretical expectations. From table 3, it is observed that the regression line have a positive intercept as presented by the constant (c) = 29.33829. This means that if all the variables are held constant or fixed (zero), foreign trade will be valued at 29.34. Thus, the a-priori expectation is that the intercept could be positive or negative, so it conforms to the theoretical expectation.

It is observed in table 3 that monetary policy rate, demand deposit, liquidity ratio and exchange rate have a positive impact on foreign trade in Nigeria, although exchange rate was expected to exhibit either negative or positive impact. This means that if monetary policy rate, demand deposit, liquidity ratio and exchange rate changes positively, it will bring about positive changes foreign trade in Nigeria. On the other hands, inflation rate and interest rate has shown to exhibit a negative impact on foreign trade in Nigeria. Thus, increase in inflation rate and interest rate will decrease foreign trade in Nigeria and vice versa.

From the regression analysis, it is observed that all the variables conform to the a priori expectation of the study. Thus, Table 4 summarises the a priori test of this study.

Table 4: Summary of Economic A Priori Test

Parameters	Variables		Expected Relationships	Observed Relationships	Conclusion
	Regressand	Regressor			
β_0	FOT	Intercept	+/-	+	Conform
β_1	FOT	MPR	+	+	Conform
β_2	FOT	INF	-	-	Conform
β_3	FOT	DMD	+	+	Conform
β_4	FOT	LQR	+	+	Conform
β_5	FOT	EXR	+/-	+	Conform
β_6	FOT	INT	-	-	Conform

Source: Researcher's compilation

Evaluation Based on Statistical Criteria

This subsection applies the R^2 , adjusted R^2 and the F-test to determine the statistical reliability of the estimated parameters. These tests are performed as follows:

From the study regression result, Table 3 indicated that the coefficient of determination (R^2) is given as 0.821270, which shows that the explanatory power of the variables is extremely high and strong. This implies that 82% of the variations in the foreign trade are being accounted for or explained by the variations in monetary policy rate, inflation rate, demand deposit, liquidity ratio, exchange rate and interest rate in Nigeria. While other determinants of foreign trade not captured in the model explain about 18% of the variation in foreign trade in Nigeria.

The adjusted R^2 in Table 3 supports the claim of the R^2 with a value of 0.770204 indicating that 77% of the total variation in the dependent variable (foreign trade) is explained by the independent variables (the regressors). Thus, this supports the statement that the explanatory power of the variables is extremely high and strong.

The F-statistic: The F-test is applied to check the overall significance of the model. The F-statistic is instrumental in verifying the overall significance of an estimated model. The hypothesis tested is:

H_0 : The model has no goodness of fit

H_1 : The model has a goodness of fit

Decision rule: Reject H_0 if $F_{cal} > F_{\alpha} (k-1, n-k)$ at $\alpha = 5\%$, accept if otherwise.

Where

V_1 / V_2 Degree of freedom (d.f)

$V_1 = n-k, V_2 = k-1$:

Where; n (number of observation); k (number of parameters)

Where $k-1 = 7-1 = 6$

Thus, $n-k = 28-7 = 21$

Therefore: $F_{0.05(6,21)} = 2.57$ (From F-table) ... F-table

F-statistic = 23.83623 (From Regression Result) ... F-calculated

Therefore, since the F-calculated $>$ F-table in table 4.3, the study reject H_0 and accept H_1 that the model has goodness of fit and is statistically different from zero. In other words, there is significant impact between the dependent and independent variables in the study.

Evaluation Based on Econometric Criteria

In this subsection, the following econometric tests are used to evaluate the result obtained from the study model; autocorrelation, multicollinearity and heteroscedasticity.

Test for Autocorrelation

Using Durbin-Watson (DW) statistics which the study obtain from the regression result in table.3. It is observed that DW statistic is 1.893260 or approximately 2. This implies that there is no autocorrelation since d^* is approximately equal to two. 1.893260 tends towards two more than it tends towards zero. Therefore, the variables in the models are not autocorrelated and that the models are reliable for predications.

Test for Multicollinearity

This means the existence of a “perfect,” or exact, linear relationship among some or all explanatory variable of a regression model. This will be used to check if collinearity exists among the explanatory variables. The basis for this test is the correlation matrix obtained using the series. The result is presented in Appendix 11 and summarized in Table 4.5 below.

Table 4.5: Summary of Multicollinearity Test

Variables	Correlation Coefficients	Conclusion
MPR and INF	-0.135886	No multicollinearity
MPR and DMD	0.611803	No multicollinearity
MPR and LQR	0.614640	No multicollinearity
MPR and EXR	0.117985	No multicollinearity
MPR and INT	0.172859	No multicollinearity

INF and DMD	0.053027	No multicollinearity
INF and LQR	-0.457151	No multicollinearity
INF and EXR	-0.462541	No multicollinearity
INF and INT	0.560702	No multicollinearity
DMD and LQR	0.309885	No multicollinearity
DMD and EXR	0.142270	No multicollinearity
DMD and INT	0.370586	No multicollinearity
LQR and EXR	0.620803	No multicollinearity
LQR and INT	-0.285863	No multicollinearity
EXR and INT	-0.492155	No multicollinearity

Source: Researchers compilation

Decision Rule: From the rule of Thumb, if correlation coefficient is greater than 0.8, the study conclude that there is multicollinearity but if the coefficient is less than 0.8 there is no multicollinearity. The study therefore, concludes that the explanatory variables are not perfectly linearly correlated.

Test for Heteroscedasticity

This test is conducted to see whether the error variance of each observation is constant or not. The hypothesis testing is thus:

H_0 : There is a homoscedasticity in the residuals

H_1 : There is a heteroscedasticity in the residuals

The decision rule if is to Accept the null hypothesis that there is a homoscedasticity (i.e. no heteroscedasticity) in the residuals if the probability of the calculated F-test statistic (F) is greater than the 0.05 level of significance chosen in the study, the null hypothesis will be accepted.

Hence, $P(F) = 0.2310$. This means that the probability F statistic is greater than 0.05 level of significance. Therefore, the study accepted the null hypothesis that the model has no heteroscedasticity in the residuals and therefore, the data is reliable for predication.

Test of Research Hypotheses

The t-test is used to know the statistical significance of the individual parameters. Two-tailed tests at 5% significance level are conducted. The result is shown on Table 6 below. Here, the study compare the estimated or calculated t-statistic with the tabulated t-statistic at $t_{\alpha/2} = t_{0.05} = t_{0.025}$ (two-tailed test).

Degree of freedom (df) = $n - k = 28 - 7 = 21$

So, the study has:

$T_{0.025(21)} = 2.080$ Tabulated t-statistic

In testing the working hypotheses, which partly satisfies the objectives of this study, the study employs a 0.05 level of significance. In so doing, the study is to reject the null hypothesis if the t-value is significant at the chosen level of significance; otherwise, the null hypothesis will be accepted. This is summarized in table 6 below.

Table 6: Summary of t-statistic

Variable	t-calculated (t_{cal})	t-tabulated ($t_{\alpha/2}$)	Conclusion
Constant	4.385491	± 2.080	Statistically Significance
MPR	3.398064	± 2.080	Statistically Significance
INF	-5.279949	± 2.080	Statistically Significance
DMD	3.973106	± 2.080	Statistically Significance
LQR	2.988577	± 2.080	Statistically Significance
EXR	5.477663	± 2.080	Statistically Significance
INT	-3.899300	± 2.080	Statistically Significance

Source: Researchers computation

The study begins by bringing the working hypothesis to focus in considering the individual hypothesis.

For MPR, $t_{cal} > t_{\alpha/2}$, therefore the study reject the null hypothesis and accept the alternative hypothesis. This means that monetary policy rate has a significant impact on foreign trade in Nigeria.

For INF, $t_{cal} > t_{\alpha/2}$, therefore the study reject the null hypothesis and accept the alternative hypothesis. This means that inflation rate has a significant impact on foreign trade in Nigeria.

For DMD, $t_{cal} > t_{\alpha/2}$, therefore the study reject the null hypothesis and accept the alternative hypothesis. This means that demand deposit has a significant impact on foreign trade in Nigeria.

For LQR, $t_{cal} > t_{\alpha/2}$, therefore the study reject the null hypothesis and accept the alternative hypothesis. This means that liquidity ratio has a significant impact on foreign trade in Nigeria.

For EXR, $t_{cal} > t_{\alpha/2}$, therefore the study reject the null hypothesis and accept the alternative hypothesis. This means that exchange rate has a significant impact on foreign trade in Nigeria.

For INT, $t_{cal} > t_{\alpha/2}$, therefore the study reject the null hypothesis and accept the alternative hypothesis. This means that interest rate has a significant impact on foreign trade in Nigeria.

4. CONCLUSION AND RECOMMENDATIONS

The study attempted to explain the influence of monetary policy rate, inflation, demand deposit, liquidity ratio, exchange rate and interest rate on trade balance. From the result of the OLS, it is observed that monetary policy rate, demand deposit, liquidity ratio and exchange rate have a significant positive impact on foreign trade in Nigeria. This means that increases in monetary policy rate, demand deposit, liquidity ratio and exchange rate, will lead to increase in foreign trade in Nigeria. On the other, inflation rate and interest rate has a significant negative impact on foreign trade in Nigeria, meaning that as inflation rate and interest rate increases, will be bring about a decline in foreign trade in Nigeria. From the regression analysis, it is observed that all the variables conform to the a priori expectation of the study and the variables of the study are statistically significant in explaining foreign trade in Nigeria. The F-test conducted in the study shows that the model has a goodness of fit and is statistically different from zero. In other words, there is a significant impact between the dependent and independent variables in the model. Finally, the study shows that there is a long run relationship exists among the variables. Both R^2 and adjusted R^2 show that the explanatory power of the variables is extremely high and strong.

Based on the findings of this study, the study recommends that the government should employ a contractionary monetary policy to fight inflation by reducing the money supply in the country through decreased bond price.

inflation, demand deposit, liquidity ratio, exchange rate and interest rate have influenced trade balance in Nigeria. The government should intervene in the foreign exchange market in order to build reserves for

themselves or provide them to the bank to help stabilize the exchange rate. The government should strive to improve trade performance in the short and long run. They should also reduce government spending and tax capital inflow.

REFERENCES

- [1] Inimino, E. E., Akpan, J. E., Otubu, O. P. & Alex, I. O. (2019). Monetary approach to Nigerian balance of payments. *International Journal of Science and Management Studies (IJSMS)*, 2(3), 1-13.
- [2] Nizamani, A. R., Karim, Z. A., Zaidi, M. A. S. & Khalid, N. (undated). Trade balance response to shocks in monetary policy and exchange rate: Evidence from Pakistan using SVECM approach. *International Journal of Business and Society*, 18(3), 579-594.
- [3] Nwanosike, D. U., Uzoechina, B., Ebenyi, G. O. & Ishiwu, V. (2017). Analysis of balance of payments trend in Nigeria: A test of Marshall-Lerner hypothesis. *Saudi Journal of Business and Management Studies*, 2(5), 468-474
- [4] Odungweru, k. & Ewubare, D. B. (2020). The effect of monetary policies on foreign trade in Nigeria: 1980-2017. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 25 (1), 01-13.
- [5] Proso, T., Inaya, L. S. & Okoye, E. I. (undated). Monetary Policy and Balance of Payments in Nigeria. Chapter Nine
- [6] Udude, C. C. (2015). Monetary Policy and Balance of Payment in Nigeria (1981-2012). *Journal of Policy and Development Studies*, 9(2), 14-26.