International Journal of Advances in Engineering and Management (IJAEM)
Volume 3, Issue 3 Mar. 2021, pp: 800-809 www.ijaem.net ISSN: 2395-5252

Monetary Policy as an Instrument of Economic Stabilization in an Emerging Economy.

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Submitted: 05-03-2021 Revised: 18-03-2021 Accepted: 20-03-2021

ABSTRACT: This study investigatesthe monetary policy as an instrument of economic stabilization in an emerging economy using Nigeria as a case study for the period spanningyear 2000 to 2018. The study specifically examines the effect of exchange rate, interest rate, money supply, and inflation rate on economic stabilization in Nigeria. It employs ordinary least square method to investigate the short run relationship among variables and the error correction model (ECM) to investigate the long run relationship. The study results showed that in the short run money supply and exchange rate has a direct relationship with the gross domestic product while inflation rate and interest rate has an inverse relationship with gross domestic product (GDP). The long run reveal that the variables had a mixed impact on the explanatory variable becauseexchange rate(0.130156) has a positive and significant relationship with the dependent variable (GDP) while interest rate(-0.382620), money supply(-0.874766) and inflation rate(-0.029678) also has a negative impact on the dependent variable. This research recommends thatimperative for economic experts and policy makers to make proper policy recommendations to enhance economic growth that will help to stabilize the capital market in the presence of external shocks, caused by macroeconomic fundamentals fluctuationsthereby making the market more attractive to prospective, existing and foreign investors.

I. INTRODUCTION

Growth policies in less developed economies are healthier to be conveyed as a full bundle since monetary and fiscal policies are complex, aside in terms of the tools and the implementing authorities. Nevertheless, monetary policy seems to be more active and potent in modifying short-run macroeconomic instability due to the rate at which policy instruments are applied and altered. It is also active with which its process of decisions and sheer nature of the sector that promote its impact on the real economy, that is the financial sector.

Price stability and monetary stability are the major policy objectives of the Nigerian monetary policy. One of the main channels of attaining monetary and price stability is via appropriate interest rate structures which allows savers to avail investors of surplus funds for investment. Also to ensure proper monitoring of banks and related institutions so as to guarantee the financial sector's efficiency by curtailing broad in the naira exchange rate variation. Efficient and practical payment structure must as well be maintained.

Policies to raise the coverage of the economic system must be thoughtfully applied so that interior economies that are hugely informal are financially included. The effectiveness and efficiency of monetary policy is a product of a vibrant financial system. Because the larger the financial system, the more sensitive interest rate of production and aggregate demand will be in an economy. The high inflation rate, low investment, and increasing unemployment rate are the major challenges faced by the Nigerian economy and these factors slow the pace of Nigerian economic progress. The problem highlighted above can better be managed or tackled via -contractionary and expansionary measures by the Central Bank of Nigeria (CBN) as the monetary instrument to manipulate the fluctuations experienced so far in the Nigerian economy.

Furthermore, considering the conflicting result in literature as regards to the assessment ofmonetary policy as an instrument of economic stabilization in Nigeria. In the same vein, Kutu, Nzimade and Msomi (2017), Chan (2016) and Wong and Chong (2015) discovered that monetary policy has significant effect on economic stabilization in Nigeria while Drama (2017), and discovered otherwise. Also, AbuDalu, Elsadig, Almasaled and Abuelgasim (2014), Irfan and Amen (2011) and Anowor and Okorie (2016) discovered that monetary policy has positive effect on

economic stabilization in Nigeria while Srithilat and Sun (2017) and Obadeyi,Okhiria, and Afolabi (2016) discovered otherwise and interestingly, Douanla (2014) discovered both effects on economic stabilization in Nigeria. Hence, given these divergences in the findings of authors, there is an evidence research gap which this study is set to fill by providing validating results on assessing monetary policy as an instrument of economic stabilization in Nigeria and therefore examine the effect of exchange rate, interest rate, money supply and inflation rate on economic stabilization in Nigeria.

II. LITERATURE REVIEW

Monetary policy as a measure of economic management for an enduring economic progress for nations and how economic aggregate is affected by money could be widely traced to the days of Adam Smith and later promoted by monetary economists.

Wrightsman (2006) opined that monetary policy entails those actions initiated by the central bank which aim at influencing the cost and availability of credits. Okwo, Eze, andNwoha (2012), monetary policy consists of a government formal effort to manage the money in its economy in order to realize specific economic goals. According to Ogunjimi (2007) three basic kinds of monetary policy decision can be made - the amount of money in circulation; the level of interest rate; and the functions of credit markets and the banking system. The combination of these measures is designed to regulate the value, supply and cost of money in an economy, in line with the level of economic activity. Abeng (2006) explained that monetary policy is valid only for a highly monetized economy. If the economy is not monetized, the efficacy of monetary policy is restricted. For instance, in an underdeveloped economy where a large proportion of output is produced in a subsistence sector, supply of money would be independent. Monetary policy, therefore, would not be a better tool to manage the economy.

Definitions of monetary policy shows that monetary policy boils down to adjusting the supply of money in the economy to achieve some combination of inflation and output stabilization. Most economist agree that in the long run output usually measured by gross domestic product (GDP) is fixed, so any changes in the money supply only cause prices to change. But in the short-run, because prices and wages usually do not adjust immediately, changes in money supply can affect the actual production of goods and services (Koshy, 2012).

The stabilization of the rate of exchange, domestic price and the foreign exchange reserve remains the primary objective of the monetary policy in Nigeria based on its core role of advancing economic growth and external sector efficiency. However, evidence from different countries indicates inconsistencies with theoretical expectations which are what economists always tagged “puzzle”. The three puzzles identified in the most literature are the price puzzle, liquidity puzzle, and exchange rate puzzle. The price puzzle indicates that contractionary monetary policy via positive innovations in the rate of interest result to rise (rather than fall) in price. While the liquidity puzzle shows that a rise in monetary aggregate goes with an increase (rather than decline) in the rate of interest. Exchange rate remains the most common puzzle where a rise in the rate of interest is associated with depreciation (instead of appreciation) of the domestic currency.

Empirical Literature

Mushtaq and Siddiqui (2016) studied the effect of interest rate as a monetary policy variable on bank deposits in USA between a period of 1999 and 2014. The study used bank deposits as the dependent variable and also used interest rate as the independent variable coupled with the use of the Panel Auto Regressive Distributed Lag modeling technique; it was revealed that interest rate has positive effect on bank deposit. Hence, it was recommended that depositors’ behaviour should be considered while making policies.

Beivin, Kiley and Mishkin (2019) examined that the existing relationship between stock market returns and sets of macroeconomic variables which are exchange rate, inflation rate, money supply industrial production index, long term bond rate and call money rate. The study via the use of Vector Error Correction Model (VECM) in Japan. Their findings revealed that the set of macroeconomic variables are co-integrated with the Japanese stock price.

Saqib and Aggarwal (2018) studied the effect of fiscal and monetary policy on economic growth in Pakistan between 1984 and 2014. The study used Gross domestic product as the dependent variable and also money supply and fiscal balance as independent variables coupled with the use of Johansen Co-integration test, it was divulged that monetary and fiscal policy has long run relationship with economic growth. Hence, it was recommended that monetary policy should be given proper attention to foster economic growth.

Srithilat and Sun (2019) studied the impact of monetary policy on economic

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development in Lao PDR between 1989 and 2016. The study used Gross Domestic product as the dependent variable and also used money supply, interest rate, inflation rate and exchange rate as independent variables coupled with the use of Error Correction Modeling technique, it was revealed that monetary policy has negative effect on economic growth. Hence, it was recommended that monetary authorities should make use of exchange and interest rates as monetary policy tools rather than money supply due to the inflationary effect.

Emma (2016) investigated the determinants of monetary policyin Nigeria between 1980 and 2018 using the ordinary least square method. The result revealed that money supply and interest rate influenced inflation positively, while government expenditure and exchange rate influenced inflation negatively. They suggested that for a good performance of the economy in terms of price stability may be achieved by reducing money supply and interest rate and also increase government expenditure and exchange rate in the country.

Inam&Ime, (2017) examined the determinants of monetary policy using data from 1990 to 2017 in Nigeria with the ordinary least square method. The empirical result showed that money supply, one year lagged value of interest rate positively and significantly affect inflation. The result also indicated that one year lagged value of money supply and one year lagged value of fiscal deficit significantly and negatively influence over inflation rate. There was an insignificant relationship between interest, fiscal deficit and nominal exchange rate. The explanatory variables accounted for 87 percent of the variation of inflation in during the period.

Dania (2019), in her work studied the determinants of monetary policy in Nigeria, time series econometric technique (Error Correction Model) was used to capture the convergence of the inflation determining factors to achieving long run equilibrium. Yearly data between 1970 and 2018 was used, and found that expected monetary policy , measured by lagged term of inflation, money supply, significantly determine monetary policy, while trade openness , capturing the tendencies of imported inflation, income level, exchange rate and interest rate were found not be significant with all showing signs that conform with apriori in the short run. In the long run likewise, none of the variables was found to be significant.

III. RESEARCH METHODOLOGY

Model Specification

The study will be carried out using a time series annual data of Nigeria from 2000 to 2018. It is necessary to note that this study theoretically underpin the working of the Keynesians theory which states that a tight monetary policy will most likely cause a reduction in output and the price level to the extent that it does upset aggregate demand. However, the model to be adapted for the main study is the work of Emma (2016) which can be expressed canonically below as:

GDP = f (INFL, INTR, MS, EXGR, μ)…… (3.1)

This model can for the purpose of simplicity be stated in the econometric form of equation as depicted below:

$GDP = B_0 + B_1INFL + B_2INTR + B_3MS + B_4EXGR + \mu$…… (3.2)

Where;

GDP= Gross Domestic Product
INFL= Inflation Rate
INTR= Interest Rate
MS= Money Supply
EXGR = Exchange Rate
μ= Error Term
B_0= Constant Parameter
$B_1 – B_5$ = Coefficients of Regression

Estimation Technique

This current study in its bid to examine the short and long-run dynamic relationship between the variables in the model employs the Johansen's co-integration framework with respect to the ECM model. If co-integration exists alongside its extents and forms, the next step required is to develop an over-parameterized error correction model (ECM 1) which involves the process of leading and lagging the variables and then a parsimonious error correction model (ECM 2) that incorporates long-run equilibrium relationship and short-run dynamics into the model.

The choice of the technique rests solely on the fact to establish a long run equilibrium relationship between the dependent (explained) variable and the independent (explanatory) variables unlike the Ordinary Least Square (OLS) analysis which is susceptible to spuriousity of results and of which its results are short run oriented and somewhat misleading. The following statistical test will be employed; unit root, co-intregation, standard error test and co-efficient of multiple determination.

IV. DATA ANALYSIS, RESULTSAND FINDINGS

The study is conducted to critically investigate the assessments of monetary policy as

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an instrument of economic stabilization in Nigeria. This section looks critically into bringing into limelight the short and long run relationship that subsides between monetary policy and the stabilization of the Nigerian economy.

Thestudy employs the gross domestic product (GDP) as the dependent variable alongside with four independent variables which are inflation rate, interest rate, money supply, and exchange rate.The trend analysis of the flow of monetary policy on the stabilization of the Nigerian economywas explore, the ordinary least square was used to test the short run relationship between the dependent and the independent variable, while on the other hand the Johannes co-integration and the error correction model was used to explore the long run relationship that subsist between the dependent variable and the independent variable and lastly the post estimation test was conducted on the research to ascertain its validity.

Trend Analysis

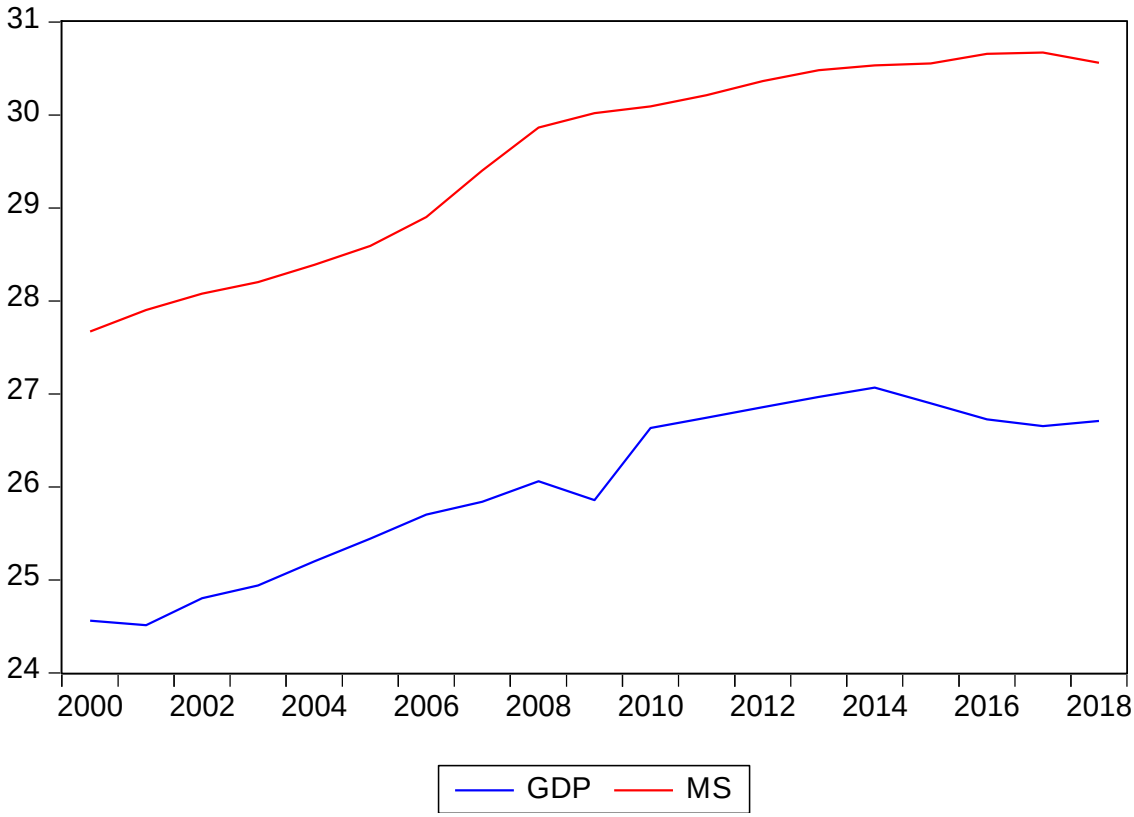

Figure 1: The flow monetary policy on the stabilization of the Nigerian Economy

The upward slope reviews the flow of money supply in the economy which provides an understanding of the presence and withdrawal of funds in the economy, while the downslope reviews the regularization of the economy growth, depicting the response rate of the economy to the flow or circulation of funds in the country. The monetary policy slope is seen to be upward slope from the region of 27.9units to 31units from a period of 2000 to 2018 but the economy growth is seen to possess an irregular flow alongside the flow of money supply in the economy. The period of 2000 to 2008 there is boost in the influx of funds in the economy as seen in figure 1 but the slope of the economy growth shows that the economy is not responding as required to the upward flow of funds because the slope reviews that there is a suspected bridge in regularization of the economy during this period of boost in the money supply. A period of 2014 to 2018 there is a drop in the performance of the Nigeria economy but the flow of funds (money supply) appears to be heavily regulated during this period although there is a drop but not as noticeable like the economic growth. In conclusion the figure 1 reviews that money supply is seen to be dependent of the Nigeria meanwhile the regulation of the flow of funds is noticeable on the regularization of the economy.

Unit Root Test

The Augmented Dickey Fuller (ADF) Unit Root Test(URT) is summarized in table 1 and 3.

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Table 1: Unit Root Test at level

Variables	ADF Statistics Value	Mackinnon Critical Value @ 5%	Prob. Value	Remarks
GDP	-1.619082	-3.040391	0.4529	Non- Stationary
INFL	-3.235768	-3.040391	0.0344	Stationary
INTR	-2.094319	-3.040391	0.2487	Non-Stationary
MS	-2.402991	-3.081002	0.1571	Non- Stationary
EXGR	-1.661203	-3.040391	0.4328	Non-Stationary

Source: E-view Output (2020)

Table 1 shows that the entire variable in the table are non-stationary at level 1 except for inflation rate which implies that taking into the ADF statistics test and Mackinnon Critical Value statistics we can conclude that GDP, INTR, MS, and EXGR are not stationary at level 1 which implies that we can proceed to first differences to check their stationary level in the study.

Table 2: Unit Root Test at First Difference

Variables	ADF StatisticsValue	Mackinnon Critical Value @ 5%	Prob. Value	Remarks
GDP	-4.315893	-3.052169	0.0043	Stationary
INTR	-5.460954	-3.098896	0.0008	Stationary
MS	-0.466698	-3.081002	0.8728	Non-Stationary
EXGR	-4.045001	-3.052169	0.0073	Stationary

Source: E-view Output (2020)

Table2 revealed that all the other variables (GDP, INTTR and MS) were obtained as stationary at first difference expect for MS. This is because their respective ADF test statistics value is greater than Mackinnon critical value at 5% and at absolute term. So we proceed to the second difference to test the level of significance of money supply, this is shown in the table 3 as:

Table 3: ADF Unit Root Test at Second Difference

Variables	ADF StatisticsValue	Mackinnon Critical Value @ 5%	Prob.Value	Remarks
MS	-4.075875	-3.081002	0.0081	Stationary

Source: E-view Output (2020)

It can be said that money supply is stationary at second difference after taking into consideration the decision rule which state that a variable will be held viable and stationary if the value of money supply at ADF statistics value is greater that Mackinnon critical value @5% .

Summary of Order of Co-integration

The summary of the Augmented Dickey Fuller (ADF) unit root test is presented in Table 4.

Table 4: -Summary of Order of Integration

Variables	Order of Integration
GDP	I(1)
INFL	I(1)
INTR	I(0)

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MS	I(2)
EXGR	I(1)

Source: E-view Output (2020)

The table 4reveals that the dependent variable (GDP) is seen to be stationary at its first difference while the inflation rate, exchange rate and interest rate variablesare seen to be stationary at its first differences, the money supply variable is the only variable that is seen to be stationary at its second differences.

Short-Run Estimate

In a bid to establish the relationship that exist between the gross domestic product and the four other independent variables, there is a need for the proper understanding of the relationship that exist amongst the variables in the short run. It is noticeable that the short run relationship was facilitated by the ordinary least square results;

Table 5:- Short Run Estimate

Dependent Variable: - GDP

Independent Variables	Regression Coefficients	T- Statistics	Probability Value
INFL	-0.166197	-1.231769	0.2383
INTR	-0.299255	-1.369942	0.1923
MS	0.542238	4.131147	0.0010
EXGR	1.169965	1.559929	0.1411
C	5.717439	2.714439	0.0168

R^2 = 0.961424 **Adjusted R^2**= 0.95040 **F-Stat** = 87.22919 **DW-Stat**= 1.234184**Sources:**E-View Output (2020)

Evidence from the results of the Ordinary Least Square (OLS) as depicted in table 5, revealed that the constant parameter is inversely related to Gross Domestic Product (GDP). The Constant parameter (B_0) has a positive coefficient of 5.717439. This implies that when all the explanatory variables varies at zero level i.e. they are held constant in the short-run, it will increase the level of the explained variable (Gross domestic product) by 8.96E+10 units.

The coefficient of Inflation Rate (INFL) was obtained as -0.166197 units. This connotes that in the short run, Inflation Rate (INFL) is directly related to the dependent variable (GDP). This relationship portends that as inflation rate increases by a unit, GDP will also decrease in the same proportion, therefore stemming down the value of GDP by 0.166197 units. Since it has been stated that the relationship between these two variables can either take a positive or negative form, the result obtain is however in consonance with the prior expectation that was explicitly stated in the last chapter. Similarly, the coefficient of Interest Rate (INTR) also appeared negative; this implies that there is an indirect relationship between INTR (Interest Rate) and GDP (Gross domestic product) in the short run. The short run equilibrium relationship existing between GDP (Gross Domestic Product) and INTR (Interest Rate) also conformed to the a priori expectation which states that the relationship between interest rate and gross domestic product. The relationship shows that a unit increase in Interest Rate (INTR) will cause Gross Domestic Product (Gross Domestic Product) to fall by 0.299255 units.

The coefficient of Money Supply (MS) showed a positive figure of 0.542238 units, this implies that the variable exhibits a direct relationship with the dependent variable Gross domestic product (GDP). It therefore typifies that a unit increase in the money supply (MS) will result into 0.542238units increase in the value of the Gross Domestic Product (GDP) in the Nigeria economy. This dynamic relationship existing between Exchange Rate (EXGR) and Gross Domestic Product (GDP) is in conformity with the a priori expectation of the study. Conversely, the relationship between Exchange Rate and Gross Domestic Product is positive. Hence, exchange rate parameter showed a positive coefficient of 1.169965 unit which denotes an direct relationship with Gross domestic product, which implies that an increase in exchange rate will to an increase in the dependent variables by 1.169965 unit.

Meanwhile, the coefficient of multiple determination denoted as R^2 with a value of 0.9614which implies a 96% explanation of the behaviour of the gross domestic product in the Nigeria economy can be explained by the totality of the explanatory variables (INFL, INTR, MS, and EXGR) on the short-run while the remaining 4% is being explained by the stochastic/random variable in the research model. After series of adjustment, the adjusted R^2 revealed a value of 0.95040, shows

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that 95% of the total variation in gross domestic product behaviour can be explained by all the explanatory variables put together with the remaining 5% behaviour attributed to other unexplained variables outside the research model otherwise referred to as the error term or white noise.

The Long Run Model

Given preferences to the Johansen co-integration result in the test conducted for the existence of a long-run relationship, it could be inferred that there is the presence of long-run relationship among the dependent and the explanatory variables in the research model adopted for the study. This however prompted the need for the establishment of a co-integration model. The co-integrating equation in this study will be chosen based on log likelihood ratio. This is derived from the Johansen co-integration result from which the equation with the lowest log-likelihood ratio is chosen when all equations obtained are positively signed. But we chose the equation with highest log likelihood ratio, if all equations obtained are negatively signed. Since all the co-integrating equations obtained in the result are positively signed, the decision is that the equation with the lowest log-likelihood ratio which also simultaneously appeared as though the first normalised equation with the corresponding value of 86.35532 is chosen. It is therefore presented below:

Table 6: The long run Estimates

Dependent Variable: GDP

Variables	INFL	INTR	MS	EXGR
Coefficient	-0.029678	-0.382620	-0.874766	0.130156
Standard Error	(0.03145)	(0.03095)	(0.02590)	(0.16089)

Source: Author Computation (2020)

Taking preferences from the table 6, the coefficient of Inflation rate (INFL) is -0.029678 units, implying an indirect relationship between INFL and GDP on the long run. A unit increase in INFL will cause a decrease in GDP by 0.029678 units.

The coefficient of INTR is 0.382620 units. The coefficient is negatively sloped signed showing that in the long run, INTR and GDP are indirectly related and that a unit increase in the value of INTR by a unit will bring down the value of GDP by 0.382620units. The study also confirmed from the results of the long run model, that GDP will decrease in the long run by 0.874766 units if money supply increases by a unit.

The coefficient of exchange rate is 0.130156 units. The positively signed coefficient signifies that EXGR and GDP have a positive long run relationship. This is to say that, a unit increase in EXGR (Volume of currency outside the country boundary) means that GDP will be increased by 0.130156 units.

Also, in the long run none of the variables except exchange rate conformed to the a priori expectation that was earlier stated in the previous chapter of this study. Moreover, all explanatory variables provided both positive and negative relationship with GDP in the long run to what is obtainable in the regression equation provided by the short run results.

Error Correction Modelling

The error correction mechanism explain the speed or degree of adjustment, that is, the rate at which the dependent variable adjust to changes that occur in the independent variables. In line with the result obtained in the unit root rest, above, the error correction mechanism showed that the ECM is stationary at level, therefore, an over-parameterized error correction model is required in this analysis and was obtained by using the lag length to ensure that the dynamics of the model is not compromised and properly captured. The result of the over-parameterized error correction model (ECM1) is presented in table 7:

Table 7: Result of the Over-Parameterized Model (ECM 1)

Dependent Variable = D (GDP, 2)

Variable	Coefficients	Standard Error	T-Statistics	Probability Value
D(GDP(-1),2)	-0.514097	0.132429	-3.882050	0.0082
D(INFL,2)	-0.070106	0.085727	-0.817776	0.4447
D(INFL(-1),2)	-0.203144	0.094958	-2.139293	0.0762
D(INTR,2)	-0.243276	0.113132	-2.150379	0.0751

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D(INTR(-1),2)	-0.182311	0.149543	-1.219117	0.2685
D(MS,2)	0.378462	0.462509	0.818279	0.4445
D(MS(-1),2)	-0.335476	0.505411	-0.663769	0.5315
D(EXGR,2)	1.918654	0.384902	4.984783	0.0025
D(EXGR(-1),2)	1.454268	0.680211	2.137966	0.0764
ECM(-1)	-1.048308	0.234485	-4.470688	0.0042

R-squared = 0.953302 **Durbin-Watson Stat** = 2.039840

Source: E-view Output (2020)

The summary of the over-parameterized ECM results above reveals that the coefficient of the error correction term is significant with the negative sign i.e. the (–) sign justifies its significance. This means that it will be effective in the correction of any deviations from the long-run equilibrium. The coefficient of ECM is -1.025069, indicating that, the speed of adjustment to long run equilibrium is approximately 1.03% when any past deviation will be corrected in the present period. This implies that the present value of GDP adjust slowly to changes in INFL, IINTR, MS and EXGR.

However, in order to attain effectiveness of the research model there is a need to simplify the research model into a more interpretable and certainly more parsimonious model. The parsimonious model would be developed by estimating the equations of only those variables found to be significant in the over-parameterized model i.e. those that have the least probability value, with the lead and lagged value of the dependent variable being inclusive. The table below shows the result of the parsimonious model estimated.

Table 8: Result of the Parsimonious Model (ECM 2)

Dependent Variable = D (GDP, 2)

Variable	Coefficients	Standard Error	T-Statistics	Probability Value
D(GDP(-1),2)	-0.306923	0.155911	-1.968571	0.0773
D(INFL(-1),2)	-0.080439	0.082179	-0.978828	0.3508
D(INTR,2)	-0.157792	0.122376	-1.289403	0.2263
D(MS,2)	0.303754	0.531178	0.571850	0.5800
D(EXGR,2)	1.449274	0.519232	2.791187	0.0191
ECM(-1)	-0.880551	0.323922	-2.718401	0.0216

R^2 = 0.817141 **DW Stat = 2.140812**

Source: E-view Output (2020)

From the table above, it can be deduced that the coefficient of ECM is -0.880551. The negative value obtained in the parsimonious model, further proved that the ECM is significant. The negative coefficient of ECM in the parsimonious model indicates that the speed of adjustment of any past deviation to long run equilibrium is 88%. This shows that present value of the dependent variable adjust more rapidly to changes in the independent variables than what was obtained in the over-parameterized model.

The result of the parsimonious model also reveals that all variables, that is, the lagged value of INFL, lagged value of INTR, lead value of MS are statistically insignificant. Their insignificance was determined taking into consideration their probability value. The corresponding probability value of each variable must be less than 10%. This study conclude that changes affecting GDP are determined by four monetary policy fundamentals (INFL, INTR, MS and EXGR) in the short run and by one variable (exchange rate) in the long run with inference drawn from the parsimonious model (ECM 2).

Table 8 reveals that the coefficients of INFL, INTR, are negative while the coefficients of money supply (MS) and exchange rate (EXGR) are positive. From the results, it could be deduced that inflation-rate (INFL) has an inverse relationship with Gross domestic product (GDP) because of the negatively signed coefficient i.e. -0.080439 units. This implies that a unit increase in inflation rate will lead to decrease in GDP by 0.080439 units. Also, the coefficient of INTR is -0.157792 units, which suggests that a negative relationship subsists between INTR and GDP. The implication of a unit change in INTR is that GDP will consequently drop by 0.157792 units.

The results also indicate that MS and are positively related. The MS coefficient is 0.303754.

A unit increase in MS will only cause Gross domestic product (GDP) to rise by 0.303754 units. In agreement with the money supply results, EXGR and GDP are positively related. EXGR has a coefficient of 1.449274 units. This means that if EXGR should increase by a unit, GDP will increase by 1.449274 units.

The coefficient of multiple determination (R^2) in the parsimonious model is 0.595167≈ 0.60 which indicates that in the long run, only 60% of total variations or changes in the present value of GDP is explained by changes of past value in the explanatory variables (INFL, INTR, MS and EXGR) all put together while the remaining 40% is explained by other variation that exist outside the research model i.e. the error term or stochastic variables.

V. DISCUSSION OF THE FINDINGS

The major aim of this study is to determine the assessments of monetary policy as an instrument of economic stabilization in Nigeria. The trend analysis reveals that the flow of monetary supply shows a slow and spontaneous growth on the Nigerian economy and in the process of this rise there was a dire need for the attention of the monetary authority to regulate the economy at difference instances. The unit root conducted reviews that gross domestic product is stationary at 1st differences, inflation is stationary at level, interest rate appears to be stationary at the first differences, money supply is stationary at second differences, and lastly exchange rate is seen to stationary at first differences.

Thereafter the Johansen co-integration test, error correction model, and lastly the post estimation was conducted to validate the research results

The short run estimates reviews that money supply and exchange rate has a direct relationship with the control variable while the other two variables which are the inflation rate and interest rate has an inverse relationship with the control variable in the short run and the research is validated through the R-squared of the short-run estimate shows 96.14% at a level of significance which conforms with the prior expectation stated earlier in the research work, the implication of this research result shows that in the Nigeria economy the circulation of fund and value of the Nigeria currency are often seen to possess a favourable effect on the economic growth in the short while the cost of capital and inflation rate appears to be deteriorating the economy in the short run and likewise proceeding to the long run of the variables. It can be stated that the variables had a mixed impact on the explanatory variable because some of the variable had a positive effect while some have a negative impact on the control which could be explained critically has exchange rate has a positive relationship with the control variable while interest rate, money supply, and inflation rate also has a negative impact on the dependent variable.

In other to critically draw a proper findings on this research work the error correction model analysis (ECM) with the use of the lead and the lag of the variables and the analysis was tested for the level of reliability through the consideration of its R-Squared which review 82% at a level of significance and the remaining 18% was left out for other variables and error term and earlier. The result of the parsimonious model also reveals that all variables, that is, the lag inflation rate, the lead of lending rate, and lastly the lag of money supply is statistically insignificant and it could be concluded that given the decision rule of co-integration of each variable probability value must be less than 10% it can be concluded that the control variable (Gross domestic product) has three fundamental variables which are inflation rate, interest rate and money supply in the short run and only exchange rate in the long run drawing inference from the parsimonious model (ECM2).

VI. SUMMARY AND CONCLUSION

The study which focused on the empirical investigation of the assessments of monetary policy as an instrument of economic stabilization in Nigeria, the Nigerian economy was used for analytical approach to draw meaningful conclusion and also ameliorate the discrepancies that might exist between the three approaches adopted. This is done on the short-run, long-run and the determination of short and long run estimates that exist amongst variables i.e. GDP and four monetary policy fundamental variables over a period spanning through 2000 to 2018. In the overview, the study shows significant relationship between variables both in the short-run and long-run. It then implies that all variables put together in this research work are significant in the explanation of the behaviour of Economic growth. The coefficient of multiple determination (R^2), both in the short-run and long-run presents the research model adopted as a veritable tool capable of explaining the behaviour of the dependent variable, hence, emphasising the importance attached to each of the explanatory variable present in the research model.

Given the research result the money supply appear to conform with a-priori expectation in the short run of this research but reverse was the case of the money supply in the long run, this

research result goes in line with Inam&Ime, (2017) findings. The research concludes that monetary policy is an ineffective instrument in the stabilization of the Nigeria economic as the money supply variable is seen to possess a negative effect in the long run with an irregular relationship with the economic growth. In the light of the findings of the study, it isimperative for economic experts and policy makers to make proper policy recommendations to enhance economic growth that will help to stabilize the capital market in the presence of external shocks, caused by macroeconomic fundamentals fluctuations thereby making the market more attractive to prospective, existing and foreign investors.

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International Journal of Advances in Engineering and Management
ISSN: 2395-5252

IJAEM

Volume: 03 Issue: 03 DOI: 10.35629/5252

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