WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Monetary Policy and the Nexus between Cash Reserve Ratio and Inflation Rate in Nigeria

Okoye Nonso J.[1], Nwosu Ngozi L.[2],Eneh Onyinye R.[3], Ezeala George[4]

[1]Department of Banking and Finance, Nnamdi Azikiwe University Awka

[2]Department of Technology and Vocational Education, Nnamdi Azikiwe University Awka

[34]Department of Accountancy, Nnamdi Azikiwe University Awka

ABSTRACT

The study evaluates monetary policy and the nexus between cash reserve ratio and inflation rate in Nigeria. The specific objective of the study is to determine the impact of cash reserve ratio on inflation rate in Nigeria. The study was anchored on Fisher's theory of money quantity. Data was sourced from CBN and Ordinary Least Square was used. The finding revealed that inflation rate is not significantly affected by cash reserve ratio and it was recommended that the CBN should stabilize exchange rate and lending rate through effective monetary policy control.

Keywords: Monetary policy,Cash reserve ratio and inflation rate

Introduction

Under the jurisdiction of the monetary authorities, monetary policy is a general macroeconomic management tool used to accomplish political and economic goals. In order to progress the government's overall economic policy and accomplish the set goals, it also requires managing money and credit. Different countries, distinct eras, and various historical and economic contexts have had different monetary policy goals. Selecting the proper purpose for a country's monetary policy is difficult since various goals conflict with one another. The monetary authority will choose the appropriate goal for the monetary policy while taking into account the unique circumstances and demands of the economy. With the new monetary framework, monetary policy outcomes are improved.The Nigerian government continues to implement monetary policy in conjunction with its monetary authority in order to control the economy. The Central Bank of Nigeria (CBN) implements both contractionary and expansionary measures as a result of adopting monetary policy to manipulate the fluctuations already experienced in the economy. The various monetary policy regimes' intended goals of decreasing inflation were not met by their target targets. Consistency in policies is a significant issue that hinders the efficiency of monetary policy in Nigeria. In Nigeria, succeeding administrations reject the idea that government exists in a continuum and instead change every policy put forth by their predecessors, regardless of whether those policies were beneficial or not, impeding economic growth.

Due to how it is implemented, the impact of monetary policy on Nigeria's economic growth has long been a contentious issue. Numerous experts, like Udude (2014), Amassoma and Olaiya (2011), believe that Nigeria's monetary policy had little impact on the country's economic expansion. This, however, contradicts the conclusions of Adigwe, Echekoba, and Onyeagba (2015), Abdulazeez (2016), and Ismail, Adegbemi and (2013). Various research on the connection between monetary policy and inflation in Nigeria demonstrates varied effects by different researchers. According to Gbadebo and Mohammed (2015), monetary policy has a considerable beneficial impact on inflation both in the short and long periods, suggesting that the monetary impulses are what are causing the inflationary scenario in Nigeria.Monetary policy, according to Ajaude, Nkamare, Ekpo, and Bassey (2015), has a favorable effect on macroeconomic aggregate (inflation). According to Nebee and Madume (2011), in the long run, only 47% of all price changes could be accounted for by the monetary policy variables Money Supply (MS) and Minimum Policy Rate (MPR). They came to the conclusion that monetary policy had a variable impact on inflation.The main objective of this study is to checkmate the impact of cash reserve ratio on inflation rate in Nigeria.

Conceptual Review

Modern Monetary Policy and its Objectives

Around the world, monetary policy frameworks have changed as circumstances have changed. Every government has goals and objectives, which are reflected in the framework chosen. Economic growth was a common goal of monetary policy in the 1970s, hence monetary aggregates were typically chosen as the ideal framework. Price stability was consequently regarded as the primary goal, with Central Banks changing to inflation targeting via interest rate restrictions as a result of the excessive inflation of the 1970s.

Inflation targeting and a targeted level of exchange rate were found to be the most important objectives of their monetary policies in a thorough study of 94 Central Banks performed by the Bank of England in 2000. (Mahadeva &Sterne,2000).Financial stability, money targeting, the balance of payments, output growth, and interest rates were listed as the other five objectives. Now let's take a look at each of these goals.

In reality, several goals could conflict with one another. As a result, it is crucial for a central bank to select sensible goals for its monetary policy and defer to other organizations responsible for setting other goals. The monetary authority typically chooses the goals of monetary policy while taking into account the unique circumstances and demands of the economy. The following is a discussion of some of the most crucial goals.

Output Growth (Economic Growth)

Every framework for monetary policy has this as its ultimate goal. In contrast to real interest rates, which in turn affect the overall amount of investment, monetary policy can have an impact on economic growth. Expanding total investment can help some emerging economies, where the financial system is still underdeveloped, achieve economic growth, demonstrating the value of the money targeting approach. The Central Bank may view economic growth as the implied goal following success in upholding income and price stability in more developed economies with fully established financial systems. Therefore, targeting inflation is more suitable for these economies.

Preferred Targets and Monetary Policy

A common organizational technique for articulating a specific goal (such as inflation at 3 percent per year) and evaluating success is to target a particular measure (as in inflation was close to our target value, or not). It is obvious that any "joined up policy" operates under the presumption that hitting the target would help achieve one, some, or all of the selected goals. The foundation for such an assumption, however, can be murky or perhaps unknown to many. Highlighting the connections between target preferences and objectives is one of the research's goals. The following discussion centers on five monetary policy aims.

Monetary Targeting

Inthe1980s, many countries employed a money targeting strategy to monetary policy, based on the notion that a small continuous expansion in the money supply would be beneficial for the economy. The strategy was further modified to take into account various credit and money classes (M0,M1,etc.). A money targeting strategy focuses on changes in monetary amounts in the economy rather than price signals, which are the focus of the majority of monetary interventions.

InflationTargeting

Price stability has evolved into many governments' top priority worldwide since the 1980s. Then, many developed countries saw the need for inflation targeting and greater central bank independence in monetary policy frameworks. In 1990, New Zealand became the first nation to use inflation targeting as part of its monetary policy framework. In accordance with this framework, the Central Bank projects and makes public a projected inflation rate, or "target," and then makes an effort to influence actual inflation in the direction of the target by using a variety of monetary tools (Bernanke, Laubach, Mishkin, &Posen, 2001). Inflation targeting was adopted by 27 Central Banks as of 2012, including those in the European Union, the United Kingdom, Korea, Brazil, and Canada (Hammond, 2012b).

Inflation targeting is criticized for the following significant flaws as well, though: (1) it is too rigid; (2) it allows too much discretion; (3) it may cause output instability; (4) it may lower economic growth; (5) it may result in weak Central Bank accountability because inflation is occasionally difficult to control; (6) it could not prevent fiscal dominance; and (7) the requirement of exchange rate flexibility may result in financial instability.

Mishkin (2007) gave a thorough explanation of such points. He argued against the first four drawbacks, but expressed worry about the last three, which he claimed could pose significant challenges in developing economies.

Price Level Targeting

In that both create targets for a price level, such as using the Consumer Price Index, price level targeting is akin to inflation targeting. The distinction is that while inflation targeting just considers the future (for example, target inflation at 2% annually), price level targeting also considers previous values while carrying out operations. Nevertheless, if the price level increased by 2% the year before (rising from 100 to 102), the price level would have to decrease the following year in order to return to the target level of 100. Targeting the price level would assist to reduce a lot of the ambiguity surrounding the price level in the future. Nevertheless, this might imply that in order to achieve price level targeting, it

Targeting prices also has the benefit of fostering greater output and inflation stability. Price-level targeting would greatly increase the expectations of a positive inflation rate, particularly in the event of the low-inflation scenario where nominal policy rates have decreased to the zero bound. As a result, inflation expectations would keep real interest rates at a negative level, promoting expenditure and aiding in the recovery of the economy (Kahn, 2009). Because the real price is not set by economic indicators or straightforward market forces, price targeting may not be beneficial for a liberal economy.

Empirical Review

Shahriyar, Mustafa, Mayis and Farid (2020)examined the impact of monetary policy (proxied by money supply and interest rate) and tax revenue on foreign direct investment (FDI) in Jordan employing time series data period from 1991 to 2017. The Vector Error Correction

Model (VECM), the Canonical Cointegrating Regression (CCR) and the Fully Modified Ordinary Least Squares (FMOLS) methods are applied in empirical estimations. Estimation results reveal that money supply has a positive and statistically significant impact on the FDI while, tax revenue has a negative impact on FDI in Jordan. Also, we find that the impact of interest rate is statistically insignificant. The results of current study are useful for the policymakers to formulate appropraite policies and support the literature for further researches in the case of developing economies

Sanusi (2020) attempted to estimate degree of fiscal dominance by econometrically analyzing degree of fiscal and monetary policies interdependence in Nigeria and South Africa. This is done to define the extent at which fiscal authority actions confine the monetary policy actions. The empirical confirmation offered in the study on the basis empirical findings showed that the degree of fiscal and monetary policies interdependence for both Nigeria and South Africa are 0.84 and 0.67. This shows that degrees of fiscal dominance in both economies are 0.16 and 0.33 respectively. The evidence shows that both economies are under low fiscal dominance, though Nigerian economy is seen to be under a lower fiscal dominance hypothesis when compared with South African economy. Therefore, the Nigerian monetary authority has greater freedom to fight inflation. However, the Nigerian economy still has a higher inflation than South Africa. The study concludes based on the empirical findings, that monetary policy authorities in Nigeria and South Africa should strive more to maintain the current level of their autonomy given their higher degree of fiscal and monetary policies interdependence.

Ajayi (2014), in his paper, compares the economic performance of selected African countries including: Ghana, Cameroon, South Africa and Kenya respectively over the last 30 years and it also make an econometric analysis for these countries for the period of 1980- 2010 so as to show the relationship between economic variables highlighted in this study and the growth of these countries. The countries were chosen for the sake of comparability only. This study investigates six hypotheses on several macro-economic variables such as investment rate; inflation rate, trade openness, foreign direct investment, government expenditures, government debt and saving rate as it affect the gross domestic product (GDP). The relationship between these variables was tested using multiple regression analysis with ordinary least square method (OLS), alongside with the panel regression analysis. The study shows that investment, fdi, debt, consumption expenditure have positive relationship with growth, whereas inflation has a negative effect on growth with their respective significance at 1%, 10% and 5% as the case may be. Policies were also drawn from the differences in performance of these countries

Amarasekara (2009) examined the impact of monetary policy on inflation and economic growth in Sri Lanka. The impact of money supply growth, changes in exchange rate and interest rate on inflation and economic growth was analyzed using a vector autoregressive (VAR) framework using two lags. The study adopted a quarterly, seasonally adjusted data from 1978 to 2005 on variables such as interest rate, money supply, inflation and real GDP in Sri Lanka. Results from the study indicated that inflation in Sri Lanka does not fall after contractionary changes in monetary policy. Furthermore, inflation reduced immediately exchange rate appreciated and the rate of interest also rose following a contractionary reserve shock.

Cheng (2006) found that monetary policy shocks effectively affect prices and exchange rates in Kenya through the interest rate channel, but have no effect in output. Specifically, through a VAR (composed by output, Consumer Price Index (CPI), M3, repo interest rate and nominal exchange rate) he observes that a positive shock in the policy interest rate results in a fall in prices and nominal exchange rate appreciation that persists for more than 12 months. And, using variance decomposition he shows that monetary policy explains, respectively, 1/3 and 1/5 of prices and exchange rate fluctuations.

Equally, Peiris and Lledo (2008) found that shocks in the money base explain changes in prices, but not in output and exchange rates in Mozambique. Divergent from the above, other studies find the lending transmission channel to output or other aggregate demand components, but not to prices.

Mangani (2011) found no predictive effect of money supply on prices for Malawi, and that the only variable able to explain prices was the exchange rate, but the latter was completely unresponsive to the monetary policy stance. Further, he found an ambiguous negative relationship between money supply and the broad monetary aggregates, with the latter reducing under expansionary shocks. He suggests that a credit channel should be surveyed.

Similarly, Rungo and Manjate (2011) found no effect of monetary policy operational variables in prices and output for Mozambique. They also found ambiguous results, that is, monetary expansionary shocks caused the nominal exchange rate appreciation and price fall. They suggest the credit channel is worth being investigated for the Mozambique case and justify that the results may be linked with an accommodative policy stance and data span limitations. However, using higher frequency data (monthly data from 2000 to 2010) with more degrees of freedom and including lending rates to capture the lending channel

Abradu-Otoo et al. (2003) report for Ghana, through a VECM, that interest rate raise in a tight monetary policy lead to temporary increases in inflation before it starts to fall, at the expense of a fall in output that lasts for 3 to 4 years. More, they show that allowing credit growth impulses GDP growth, reduces inflation and depreciates the exchange rate. According to the authors this occurs because interest rates act as

a cost for firms, such that higher interest rates increase costs and lead to higher prices. They also found an exchange rate puzzle.

Epstein and Heintz (2006) complement this analysis. They simulate a monetary expansion of 5% in the money supply for 5 years and show that output could increase by 25% with only 1.2% inflation increase. So they conclude that, contrary to the restrictive monetary stance characteristic of financial programming with focus on inflation, significant higher economic growth, and then employment creation could be achieved with low inflationary sacrifices.

In general, the evidence suggests that efforts are still required to clarify the transmission of monetary policy in SSA countries. The empirical conclusions transit between partial effects on output or prices (that is a paradox) to no effects and/or ambiguous effects. Further, some studies present data span and methodological problems that may undermine their credibility. For example, Ngalawa and Viegi (2011) wrongly chose the interest rate as operational variables for Malawi's case, when actually it is the monetary base. Uangute and Ikhide (2002), in the analysis of the Namibian aggregate demand response to the SARB repo rate, erroneously considered the latter as endogenous to Namibia's' macroeconomics variables, which is implausible (Mishra et al. 2010).

Further, these studies are limited for only using econometric quantitative analysis. They do not assess the financial and real economy frameworks of the cases they analyze that are fundamental to understand not only if, but also why the monetary policy transmission may or not effectively occur. This exercise also provides a point of departure to understand what needs to be improved.

Mangani (2011) assessed the effects of monetary policy in Malawi by tracing the channels of its transmission mechanism, while recognising several factors that characterise the economy such as market imperfections, fiscal dominance and vulnerability to external shocks. Using vector autoregressive modelling, Granger- causality, block exogeneity and innovation accounting analyses to describe the dynamic interrelationships among monetary policy, financial variables and prices. The study established the lack of unequivocal evidence in support of a conventional channel of the monetary policy transmission mechanism, and found that the exchange rate was the most important variable in predicting prices.

Olweny and Chiluwe (2012)explores the relationship between monetary policy and private sector investment in Kenya by tracing the effects of monetary policy through the transmission mechanism to explain how investment responded to changes in monetary. The study utilises quarterly macroeconomic data from 1996 to 2009 and the methodology draws upon unit roots and cointegration testing using a vector error correction model to explore the dynamic relationship of short run and long run effects of the variables due to an exogenous shock. The study showed that monetary policy variables of government domestic debt and Treasury bill rate are inversely related to private sector investment, while money supply and domestic savings have positive relationship with private sector investment consistent with the IS-LM model. Based on the empirical results the study suggests that tightening of monetary policy by 1 % has the effect of reducing investment by 2.63% while the opposite loose monetary policy tends to increase investment by 2.63%.

Ikechukwu (2014), use the multivariate Vector Autoregressive Model to analyze the effects of monetary policy rate on other rates in Nigeria. The study makes use of monthly data from M1:2007 to M9: 2012 to evaluate the cause effect relationships between monetary policy rate and short term and long term rates in Nigeria. The choice of the scope of the study lies in examining the response of interest rates to monetary policy shock since the 2007-2008 global economic crises. Result obtained from this study will be used to track the relative effectiveness of monetary policy in an emerging market where money market instrument is not fully developed.

Methodology

The study adopted *Ex-Post Facto* research design. The nature of statistics for this looks at basically secondary statistics and is time collection in nature. The statistics had been sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin and World Bank Statistical Bulletin. The variables extracted are; monetary policy, cash reserve, and inflation rate from 1999 to 2019.

Method of Data Analysis

Data were analyzed with descriptive statistics to report the mean, standard deviation, skewness, maximum and minimum value of the study variables. Inferential statistics of the data was conducted with regression analysis via E-View 9.0 statistical software, using regression analysis.

Model Specification

To measure the relationship between gross domestic product and other explanatory variables, this study would adopt a generic regression equation specified in the following form:

$Y_t = \beta (X_t) + u_t$ - - - - - - - - -i

$IFLR_t = \beta_o + \beta_1 CRR_t + \mu_t$ - - - - - - - ii

Where:

$IFLR_t$ = Inflation rate for period t

CRR_o = Cash reserve rate
β_1 = Coefficient
μ_t = error term for period t

Decision Rule

Accept the alternative hypothesis, if the P-value of the test is less than 0.05. Otherwise reject.

Data Descriptive Properties

	Mean	**Median**	**Maximum**	**Minimum**	**Std. Dev.**	**Skewness**	**Kurtosis**	**Jarque-Bera**	**P-value**	**Obs**
INFR	19.19844	12.05000	72.80000	5.400000	17.33700	1.738084	4.935157	21.10477	0.000026	32
MPR	13.62094	13.50000	26.00000	6.000000	3.853807	0.768492	5.030646	8.647789	0.013248	32
CRR	8.098437	7.650000	24.00000	1.000000	6.241077	1.132227	3.715386	7.519376	0.023291	32

Source: Output data from E-views 9.0

Unit Root Test Result

To prevent the occurrence of spurious regression result, the data were subjected to unit root test of Augmented Dickey-Fuller (ADF), The essence of the unit root test is to unveil that the time series data are free from stationarity defect that characterized most time series data due to the nature of data generation. The unit root was first performed at level but due to the fact that stationarity is not normally achieved at level estimation, the first difference was estimated. The result of the ADF results envisage that the data were not stationary at level form but become stationary at first difference.

Result of ADF Test at Level

Variables	**Intercept**	**Trend & Intercept**	**None**	**Remark**
INFR	-3.860680 (0.00)*	-2.393792 (0.37)	-1.769575 (0.07)	Stationary
MPR	-3.106136 (0.04)**	-3.813888 (0.03)**	-0.274475 (0.57)	Stationary
CRR	-1.391986 (0.57)	-5.381669 (0.00)**	0.470109 (0.81)	Stationary

Source: Data output via E-views 9.0

Note: The optimal lag for ADF test is selected based on the Akaike Info Criteria (AIC), p-values are in parentheses where (*) & (**) denote significance at 1% and 5% respectively.

Result of ADF Test at First Difference

Variables	**Intercept**	**Trend & Intercept**	**None**	**Remark**
INFR	-3.738197 (0.05)**	-3.455849 (0.05)**	-2.699503 (0.00)*	Stationary
MPR	-4.454765 (0.00)*	-4.325685 (0.01)*	-4.239900 (0.00)*	Stationary
CRR	-3.530700 (0.02)**	-4.543274 (0.00)*	-2.318554 (0.02)**	Stationary

Source: Data output via E-views 9.0

Note: The optimal lag for ADF test is selected based on the Akaike Info Criteria (AIC), p-values are in parentheses where (*) & (**) denote significance at 1% and 5% respectively.

Preliminary Test

Serial Correlation LM Test

The serial Correlation test is an alternative to the Q-statistic test for serial correlation. Unlike the Durbin Watson statistic for AR(1) errors, the LM test may be used to test for higher order ARMA errors and is applicable whether there are lagged

dependent variables or not. The null hypothesis of LM test is that there is no serial correlation up lag order 2. The p-value of the Breusch-Godfrey serial correlation test suggests that the null hypothesis could not be rejected thus the models are free from autocorrelation.

Serial Correlation LM Test

Estimated Models	F-statistic	P-value
INFR →CRR	0.573721	0.5710

Source: Output data from E-views 9.0

Heteroskedasticity Test

The rationale behind choosing this heteroskedasticity specification was based on the fact that in many financial time series data, the magnitude of residuals appears to be related to the magnitude of recent residuals. The probability of the Chq. statistic for models 1-4 in Table are insignificant at 5% level of significance, suggesting that there is no existence of heteroskedasticity in the models.

Heteroskedasticity test

Estimated Models	F-statistic	P-value
INFR →CRR	1.338594	0.2834

Source: Output data from E-views 9.0

Ramsey RESET Test

The Ramsey RESET test determines whether the model is correctly specified/fitted or not. The rationale behind the test is that if non-linear combinations of the independent variable (s) have any power in explaining the dependent variable, then the model is not well specified. The p-values as depicted in Table are insignificant at 5% level of significance, hence the models were well-specified.

Ramsey Reset Specification

Estimates	t-statistic	df	P-value
INFR →CRR	0.191100	25	0.8500

Source: Output data from E-views 9.0

Johansen Co-integration for INFR and CRR

Unrestricted Co-integration Rank Test (Trace) RGDPGR and LPD				
Hypothesized Number of CE(s)	**Eigen Value**	**Trace Statistic**	**0.05 Critical Value**	**Prob.****
None	0.276705	10.04204	15.49471	0.2775
At most 1	0.010738	0.323881	3.841466	0.5693
Unrestricted Co-integration Rank Test (Maximum Eigenvalue) INFR and CRR				
Hypothesized Number of CE(s)	**Eigen Value**	**Maximum Eigen Statistic**	**0.05 Critical Value**	**Prob.****
None	0.276705	9.718156	14.26460	0.2311
At most 1	0.010738	0.323881	3.841466	0.5693

Trace test and Max-eigenvalue test indicate no co-integrating eqn(s) at the 0.05 level;
** denotes rejection of the hypothesis at the 0.05 level; **MacKinnon-Haug-Michelis (1999) p-values.*

The ARDL regression output reveals that cash reserve ratio has insignificant negative relationship with inflation rate in Nigeria. A unit rise in cash reserve ratio results in 36.09% rise in inflation rate. When cash reserve ratio is held constant, inflation rate would be 12.44%. Fluctuation in the cash reserve ratio caused about 45.82% changes in inflation rate as evidence by the adjusted R-square coefficient (0.458205). Cash reserve ratio significantly explained the variation in inflation rate as adjudged by f-statistic (9.17) and p-value (0.00). The Durbin Watson coefficient of 1.77 is within the acceptable range of no autocorrelation in the model that is, inflation rate and cash reserve ratio are not serially correlated by virtue of included in the same model.

ARDL Regression: Inflation Rate and Cash Reserve Ratio

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFR(-1)	0.853996	0.184808	4.620979	0.0001
INFR(-2)	-0.323085	0.182454	-1.770774	0.0883
CRR	-0.360896	0.401441	-0.899002	0.3769
C	12.44200	5.607840	2.218679	0.0354
R-squared	0.514253	Mean dependent var		19.95833
Adjusted R-squared	0.458205	S.D. dependent var		17.64500
S.E. of regression	12.98790	Akaike info criterion		8.089479
Sum squared resid	4385.824	Schwarz criterion		8.276305
Log likelihood	-117.3422	Hannan-Quinn criter.		8.149246
F-statistic	9.175273	Durbin-Watson stat		1.773610
Prob (F-statistic)	0.000260			

Source: Data output via E-views 9.0

Test of Hypotheses

H_0: Cash reserve ratio has no significant effect on inflation rate.

H_1: Cash reserve ratio has significant effect on inflation rate.

Test of Hypothesis

Estimated Model	f-statistic	P-value	Decision
INFR → CRR			
CRR	0.63318	0.4329	AcceptH_0 and Reject H_1

Source: Granger Causality Output in Table 27

As can be seen the p-value (0.4329) with f-statistic (0.63318) is greater than 0.05, an indication that cash reserve ratio has no significant effect on inflation rate. Consequently, the null hypothesis that cash reserve ratio has no significant effect on inflation rate is accepted, whereas the alternate hypothesis is rejected.

Finding

Inflation rate is not significantly affected by cash reserve ratio. Inflation rate is negatively but insignificantly correlated with cash reserve ratio

Recommendation

The core mandate of the Central Bank of Nigeria, which achieving price stability through inflation targeting is far from been achieved as inflation rate continues to grow quite above the single digit target, the Central Bank should stabilise exchange rate and lending rate through effective monetary policy control.

REFERENCES

Ajaude, E., Nkamare, S.E. & James, G.B.(2015).The critical and logical analysis of the impact of monetary policy on macroeconomic aggregates. *Journal of Economics and Sustainable Development* 6:18.

Ajayi, O. (2014). Comparison of macroeconomic performance of selected African countries: an econometric analysis of economic growth of the countries. *International Journal of Innovative Research and Development*, 3,2: 1.

Ajayi,S.I.(1974). An economic case study of the relative importance of monetary and fiscal policy in Nigeria. *Bangladesh Economic Review,2*(2): 559-576.

Amassoma, D. Wosa, P. I. & Olaiya, S. A. (2011). An appraisal of monetary policy and its effect on macroeconomic stabilization in Nigeria. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)*2(3):232-237.

Asian Development Bank (2001). Asian Development Outlook 2001 *Asian Development Outlook*.ADB.

Bernanke, B. & Gertler, M. (1995).Inside the black box: the credit channel of monetary policy transmission. *Journal of Economic Perspectives*, 9, 4,27-48.

Bernanke,B.,Laubach,T.,Mishkin,F.,& Posen,A.(2001).*Inflation Targeting: Lessons from the International Experience*: Princeton University Press.

Cheng,K. C. (2006). AVAR analysis of Kenya's monetary policy transmission mechanism: How does the Central Bank's REPO rate affect the economy? *International Monetary Fund African Department Working Pape*r: WP/06/300.

Gbadebo (2004). Basic econometrics. New York: McGraw-Hill Companies.

Hammond,G.(2012a).Pros and cons of inflation targeting. Retrieved from World Bank website: http://siteresources.worldbank.org/PGLP/Resources/Session8.pdf

Hammond,G.(2012b).*State of the art of inflation targeting*: Centre for Central Banking Studies, Bank of England.

Heintz(2004). A VAR analysis of Singapore's monetary transmission mechanism, SMU Economics and Statistics working paper series 19.

Ismaila**,** M.(2014). Empirical investigation of the impact of monetary policy on manufacturing sector performance in Nigeria (1986 – 2012).*International Journal of Education and Research.2(1).*

Kahn, G. A. (2009). Beyond inflation targeting: should central banks target the price level? *Federal Reserve Bank of Kansas City Economic Review, 94*(3), 35-64.

Mahadeva, L. &Sterne, G. (2000).*Monetary policy frame works in a global context*. USA and Canada: Routledge.

Mangani,R.(2011).*The effects of monetary policy on prices in Malawi*. University of Malawi, Proceedings of Chancellor College, Department of Economics, Zambia,Malawi.

Mishkin, F. S. (1995).Symposium on the monetary transmission mechanism ,*The Journal of Economic Perspectives*, 9, 3-10.

Mishkin, F. (2007).*Monetary policy strategy*. USA: MIT Press.

Mishkin,F.& Savastano,M.(2000).Monetary policy strategies for Latin America *NBER Working Paper*: National Bureau of Economic Research

Nebee and Madume(2006).Can devaluation be effective in improving the balance of payments inVietnam?*JournalofPolicyModeling*,*28*(4),467- 476.

Ngalawa and Viegi (2009).Exchange rate policy in Vietnam, 1985-2008. *ASEAN Economic Bulletin,Institute of South east Asian Studies*,*26*(2), 27. doi:10.1355/ae26-2a

Olweny,T & Chiluwe, M. (2012):The effect of monetary policy on private sector investment in Kenya. *Journal of Applied Finance & Banking*,2(2): 239-287.

Sanusi, K. A. (2020). Fiscal dominance and inflation: Evidence from Nigerian and South African's experiences, *Cogent Economics & Finance*, 8:1, 1814508, DOI: 10.1080/23322039.2020.1814508

Shahriyar, M., Mustafa, M. A., Mayis, A., and Farid, J.(2020). The impact of monetary policy and tax revenues on foreign direct investment inflows: an empirical study on Jordan. *ACTA Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis*, 68(6).

Udude(2014) What are the effects of monetary policy on output? Results from an agnostic identification procedure. *Journal of Monetary Economics, 52*(2), 381-419.

Uangute. (2000).Determinants of manufacturing capacity utilization in Nigeria, 1970 1998. *The Nigeria Journal of Economics and Social Studies*,42(2): 121-130.