

Original Research Article

The Effects of Monetary Policy on the Contributions of Banks' Lending to Economic Performance in Nigeria

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Abstract: Monetary policy typically focused on economic performance, price stability, and external balance (Balance of Payments Equilibrium), among other things. The study's goal is to look at how banks contribute to Nigeria's economic performance through lending. The study used an econometric method to examine the impacts of monetary policy on bank lending contributions to economic performance, using Augmented Dickey Fuller (ADF), unit root test, and regression analysis as estimation techniques. Broad money supply, monetary policy rate, prime lending rate, and inflation rate were used as monetary policy indicators, whereas real gross domestic product was used as an economic performance metric. The information utilized came from the Nigerian Central Bank's Statistical Bulletin and the National Bureau of Statistics. Statistical evidence from the result regression outcome revealed that banks' lending, money supply, monetary policy rate have positive contributions to economic performance in Nigeria while inflation rate contributed positively but insignificant to economic performance in Nigeria during the studied period. The result findings further strengthen and accommodate more investment and lucrative projects into the economy which on the long run will provide job creation, reduce unemployment, reduce poverty level and contribute to the economic development of Nigeria if put onto use. The study therefore concluded that monetary policy has positive contributions to banks' lending towards Nigeria economic performance. It was recommended that the CBN needs to supervise thoroughly the banks' activities to enable them comply with all the legal regulatory frameworks and monetary policies. Not that alone, the design of monetary policy and its implementation should be made in such a way that the conflict of target is avoided.

Keywords: Monetary policy, Bank lending, Economic performance.

JEL CLASSIFICATION: C53, E47, E51, E52, E58

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INTRODUCTION

The Central Bank's monetary policy refers to the precise actions it takes to manage the value, supply, and cost of money in the economy in order to achieve the government's macroeconomic goals. Monetary management relies on the use of monetary tools such as credit to ensure price stability and a healthy balance of payment situation, selective credit restrictions, managed interest and exchange rates, as well as cash reserve and specific deposit requirements (Ajisafe & Folorunso, 2010). Because of the underdeveloped state of the

financial market and the Central Bank's purposeful interest rate limitation, the usage of market-based instruments was not obvious at the time. Prior to 1986, the economic environment that influenced monetary policy was characterized by the oil industry's dominance and the rising role of the public sector in the economy, as well as an over-reliance on the external sector.

Credit rationing was the most widely used monetary policy tool, which primarily set the rate of change for the components and aggregate of

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commercial banks' loan and advance to the private sector, as well as the sectorial allocation of bank credit, with the goal of the CBN's guidelines being to stimulate the productive sector and thus reduce inflationary pressures on economic performance. Interest rates were set at a relatively low rate primarily to encourage investment and growth. Special deposits were applied on occasion to decrease commercial banks' free reserves and crediting capability. Monetary policy, in general, refers to a set of policies meant to keep the value, supply, and cost of money in the economy in line with the amount of economic activity (CBN, 2006).

Conceptually, Lending is the way of exchanging funds from a lender to a borrower. A promise by one party to pay another for borrowed money or products and services. Credit is inextricably linked to the banking industry, since banks provide as a conduit for monies to be received by people who require them for productive uses. Banks are, therefore, debtors to the depositors of funds and creditors to the borrower of funds. Bank credit is the borrowing capacity provided to an individual, governments, firms or organisation by the banking system in form of loans and overdraft. As a result, banks owe a lot of money to their depositors and owe money to their borrowers. Furthermore, credit is the single highest-earning asset in the majority of banks' portfolios. This explains why banks devote so much time and money on estimating, monitoring, and managing credit quality. Because big resources are involved, this is naturally a practice that has a significant influence on bank lending behaviour.

Credit stimulates economic activity by channelling savings toward wealth creation, which is essential for economic growth. Credit encourages economic activity by diverting savings into productive investment, which is critical for economic progress. Total domestic bank credit may be split into two categories: private sector credit and public sector credit, totalling aggregate bank credit. Banks serve as financial intermediates between surplus and deficit units that require credit for productive reasons, according to this study.

The purpose of bank credit in an economy is outlined in financial intermediation, which stipulates that the job of financial intermediation in any contemporary economy is to provide an avenue for gathering financial flows from surplus economic actors to those economic agents craving for finance in the economy. Lenders and borrowers do not need to trade directly with financial mediators since financial institutions operate as a conduit between these entities. They step in to smooth out the problems in direct lending through delegated monitoring which is a commitment made by financial intermediaries to the organizations to which they supply funds.

The overall objective of monetary policy towards efficient bank contributions relied on the performance of the macroeconomic variables operating in the economic system and by performance; when comparing one period of time to another, this is a rise in an economy's ability to generate products and services. Financial intermediaries are critical to the expansion of the real economy and the development of both developed and developing economies in this regard. The fundamental research issue is to determine the effects of monetary policy on how much bank lending has contributed to Nigeria's economic performance. As a result, the goal of this research is to look into the effects of monetary policy on financial intermediation contributions to economic performance in Nigeria from 1986 to 2021.

While the hypothesis tested is in line with the above stated objective for the purpose of this research, it is stated in negative form as bank lending has no significant contributions to Nigeria economic performance. The study is divided into Introduction, statement of issue, literature review, research technique, result and discussion of results, conclusion and suggestions.

STATEMENT OF PROBLEM

The attainment of economic objectives is commonly used to assess an economy's performance. The objectives might be long-term, such as achieving sustainable and inclusive development, or short-term, such as ensuring economic stability in the face of unexpected and unforeseen occurrences known as economic disturbances. In order to deal with the issues of economic volatility, the Central Bank has adopted both contractionary and monetary expansion policies in the past. The question is what techniques should be taken if monetary policy is to be effective in enhancing bank lending's contribution to economic performance? What techniques should be used if monetary policy is to be effective in achieving consistent economic performance and steady progress? This is an issue that has been debated in Nigeria among scholars of repute, and this study seeks to address it.

Few studies like the works Ogun and Akinlo (2010) and Jegede (2014), examined the effectiveness of banks' credit on monetary policy transmission using Structural Vector Autoregressive Technique (SVAR) and their findings were inconsistent with each other. Moreover, the above revealed that empirical studies on monetary policy as it relates to contribution of banks' lending to economic performance and some macroeconomic variables are still limited and inconclusive in Nigeria hence this study try to unravels or harmonise the inconsistencies. Furthermore, the aforementioned discovered that research studies on monetary policy as it pertains to the contribution of banks' lending to economic strength and some macroeconomic variables using an econometric

approach are still constrained and incoherent in Nigeria, so this study attempts to unravel or reconcile the contradictions.

However, unlike other studies that primarily focus on monetary policy and economic growth, this study evaluates the metal matrix effects of monetary policy on the contribution of bank lending to economic performance, as opposed to other studies that primarily focus on monetary policy and economic growth?

As a result, the research collected yearly data up to 2021, which is the most current time as opposed to previous studies that ceased collecting data in 2016. The purpose of this study is to look at the influence of monetary policy on bank lending's role in economic performance in Nigeria, using the monetary instruments of money supply, inflation, prime lending rate, and monetary policy rate on a real GDP proxy as an economic performance indicator. Based on the empirical review of studies from developed and developing countries. The conclusions of this study either validate or disprove the findings of earlier investigations conducted in Nigeria. As a result, this research aims to bridge the knowledge gap. Another important aspect of this study's knowledge is that it employs a lengthier time of estimation. Finally, monetary policymakers in practice do not have access to up-to-date information on the status of the economy and pricing. Information is constrained not only by delays in development and availability of critical data, but also by subsequent updates, which can significantly alter the picture.

REVIEW OF RELATED LITERATURE

Olofinlade *et al.*, (2021) examined in Ekiti State, the impact of monetary policy on microfinance bank lending and the performance of small and medium-sized businesses, with profitability and market size as performance indicators. The study was anchored on growth theory, propounded by Harold (1939) and Dolmar (1946). The results outcome revealed that microfinance bank credit had significant impact on profitability of small and medium scale enterprises in Ekiti State during the studied period minding the effects of monetary policies.

Takuji *et al.*, (2021) examined and estimated using the Bank of Japan's large-scale macroeconomic model, Q-JEM, to examine the macroeconomic effects of the Bank of Japan's expansionary monetary policies since the start of Quantitative and Qualitative Monetary Contractionary (QQMC) (Quarterly Japanese Economic Model). The research explores alternative routes for significant financial variables such as borrowing costs, creating hypothetical situations in which QQMC and following expansionary policies were not implemented. Inferential simulations were run to see how Japan's macroeconomic indicators, such as real GDP and CPI, would have changed in different situations. The

difference between actual and hypothetical values was used to evaluate policy effects on macroeconomic variables in this situation. The policy effect on real GDP is between +0.9 and +1.3 percent, while the policy influence on the year-over-year speed of increase in the CPI (all categories excluding fresh food and energy) is between +0.6 and +0.7 percentage points.

Ying *et al.*, (2021) looked at five major economies in industrialized countries: the United Kingdom, Japan, Brazil, China and India to see how macroeconomic conditions changed in the aftermath of the Covid-19 epidemic. The Taylor research's technique was repeated using a model equation that was done in the form of an event study analysis, which was further validated using a regression, investigations performed for examining the relevance of CPI and real GDP in forecasting the policy cost of borrowing. The anomalous changes in interest rates were statistically meaningful in the cases of the United Kingdom, Brazil, and China, but relatively irrelevant in the cases of India and Japan, according to the results of the event systematic review.

Nwoko *et al.*, (2016), researched, which covered the years 1990-2011, looked into how the Central Bank of Nigeria's monetary policies may be utilized to boost economic growth. Multiple regression models were used as the major statistical instrument of analysis to examine the relevance of money supply, average price, interest rate, and labour force on Gross Domestic Product. The findings show that CBN Monetary Policy methods are successful in managing both monetary and real sector aggregates such as employment, prices, output level, and economic growth rate. The empirical findings reveal that average price and labour force have a considerable impact on Gross Domestic Product; however money supply has little effect. Interest rates had a negative relationship that was statistically meaningful.

Mwafag Rabab'ah, (2015) looked at the factors that influence commercial bank lending in Jordan. Between 2005 and 2013, the study sample comprised of 10 banking industries. The ratio of credit facilities to total assets was employed as a dependent variable, with eleven independent variables (ratio of deposits, ratio of non-performing loans, capital ratio, liquidity ratio, asset size, lending rate, deposit rates, window rates, legal reserve ratios, inflation rates, and economic growth rates are all factors considered) as independent variables. The findings revealed that the quasi loan ratio, liquidity ratio, and window rate all had a negative and significant influence on the credit facility ratio. While it was shown that the size of the bank and the rate of economic growth have a favourable and considerable influence on the ratio of loan facilities issued by Jordanian commercial banks.

Okoye & Eze (2013) examined between 2000 and 2010, the influence of bank lending rates on the performance of Nigerian deposit money banks was studied. The macroeconomic variables of gross domestic product, bank profits, lending rate, and monetary policy rate were used in the study. Quantitative information on econometrics of ordinary least regression approach was used in the study. The findings revealed that the lending rate and the monetary policy rate have strong positive significant influence on deposit money bank sector in Nigeria. According to the study's findings, the loan rate and the monetary policy rate are real indicators of bank success.

METHODOLOGY

The study carried out econometric approach to Using techniques such as the Augmented Dickey-Fuller (ADF), unit root test, and ordinary least square, to investigate the impact of monetary policy on the contributions of banks' lending to economic performance in Nigeria on the yearly time series data spanned the years 1986 to 2021. The model of Okoye & Eze (2013) that investigates the impact of bank lending rates on the performance of Nigerian deposit money banks was adapted and thus stated as:-

$$BE = f(LR, MPR) \dots\dots\dots 1$$

This model was modified to suit this study so as to be able to achieve the research questions with adequate variables. The model was also modified in

order to improve the fit, thereby estimating the most likely relationship or effects among the variables and to investigate how the model predictions match real observations. The equation 2 which is to represent the effects of monetary policy on contributions of banks' lending to economic performance in Nigeria after incorporating new macroeconomic is thus stated below as:-

$$(1) \text{ RGDP} = f(\text{BL}, \text{MS}_2, \text{MPR}, \text{EXR}, \text{INF}) \dots\dots\dots 2$$

Where:

$$(3) \text{ RGDP} = \Omega_0 + \Omega_1\text{BL} + \Omega_2 \text{MS}_2 + \Omega_3\text{MPR} + \Omega_4\text{EXR} + \Omega_5\text{INF} + U_t \dots\dots\dots 3$$

Where: RGDP = Real gross domestic product; BL = Represents the aggregate lending to private and public sector; MS₂ = Broad money supply; MPR = Monetary policy rate; EXR =Exchange rate; INF = Inflation rate; Ω₀ = Constant intercept; Ω₁ - Ω₅ = Parameters or coefficients to be estimated; *f* = Functional notation and U_t= Stochastic error term.

DATA ANALYSES

Stationarity Test or Unit Root Test

The study performed the Augmented Dickey-Fuller (ADF) unit root test to ascertain the stationarity of the time series variables in order to avoid spurious result from modelling non stationary variables. The test's results are shown in Table 1.

Table 1: Summary of Unit Root Test

Variables	ADF test statistic	Critical value 5%	Integration	Remark
RGDP	-3.061318	-2.857110	I(1)	Stationary
MS ₂	-3.392146	-2.857110	I(1)	Stationary
PLR	-5.639094	-2.857110	I(1)	Stationary
MPR	-6.564028	-2.857110	I(1)	Stationary
EXR	-6.142668	-2.857110	I(1)	Stationary
INF	-3.894322	-2.857110	I(1)	Stationary
BL	-4.779052	-2.857110	I(1)	Stationary

Source: E view 9 Statistical, (2021)

At the level, the real gross domestic product, money supply, prime lending rate, monetary policy rate, exchange rate, and inflation rate all flunk the stationary test, but at the first difference, they all became stationary. The reason behind this is that the Augmented Dickey Fuller (ADF) test statistics of each of the monetary policy variable was greater than 5 percent critical value of each of the monetary policy variables in absolute terms. This result implies that the economic variables have a short-run equilibrium correlation. The dynamic nature of the monetary policy

variables as revealed by the unit root test led to the adoption of fitted regression test as an appropriate models to determine the existing relationship among the monetary policy, contributions of banks' lending and economic performance in Nigeria.

Fitted Regression Model

The fitted regression estimate was applied on the studied variables, namely; (RGDP, BL, MS₂, MPR, EXR, and INF)

Table 2: Regression Result of the Effects Monetary Policy on the Contribution of Banks' Lending to Nigeria's Economic Performance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.655658	0.068724	53.19331	0.0000
BL	0.388388	0.147546	2.632295	0.0133
MS ₂	0.394148	0.129505	3.043495	0.0049
MPR	0.400720	0.118670	3.376744	0.0020
EXR	0.214770	0.031586	6.799552	0.0000
INF	0.002958	0.021174	0.139687	0.8899
R-squared	0.984349	F-statistic		364.7837
Adjusted R-squared	0.981651	Durbin-Watson stat		2.983364
Prob(F-statistic)	0.00000			

Source: E view 9 Statistical Package, (2021)

Table 2 presented the fitted regression result for impacts of monetary policy on contributions of banks' lending to economic performance in Nigeria using aforementioned macroeconomic indices. Statistical evidence from the result denotes that banks' lending, money supply, monetary policy rate exchange rate have positive contributions to economic performance in Nigeria while inflation rate contributes positively but insignificant to economic performance in Nigeria. In particular, the result denotes that banks' lending has coefficient value of 0.388388 which implies that *ceteris paribus* banks' lending could contribute positively and significantly to economic performance by 38.83%.

More so, money supply has a coefficient of 0.391448 which represents 39.14 percent contributions to Nigeria's economic performance. Furthermore, monetary policy rate explains its important contributions to Nigerian economic performance by revealing its coefficient value of 0.400720 which indicates that if deposit money banks make judicious use of the Central Bank's monetary policy rate, it will positively and significantly contribute to economic performance by 40.07%. However, inflation rate has once again prove its positive but insignificant and unstable effect on economic performance in Nigeria. This indicates that inflation rate does not contribute to the economic performance positively rather it retards the growth of the economy by its coefficient value of 0.002958 which appears more insignificant with 0.29% as relate to economic performance in Nigeria.

As evidenced by the probability and t-test statistics, it is important to note that banks' lending, money supply, monetary policy rate and exchange rate have significant effects on economic performance represented by real gross domestic product while inflation has pronounced statistical insignificant effect on economic performance. The Adjusted R² value of 0.981651 signifies estimated 98.16% of the independent variables on economic performance, that is, the banks' lending, money supply, monetary policy rate, exchange rate and inflation rate variables contributed about 98.16% variation on economic performance while the

remaining 1.84% were accounted for by the stochastic variables that were not represented in the study.

Nonetheless, the F-statistics of 364.7837 and probability value of 0.00000 indicates that the overall model is statistically significant against all odds. More importantly, the Durbin Watson test indicates that the value of 2.98 thus implied that the model is not bias and it is free from serial autocorrelation. By these revelations, the fitted regression model is said to be statistically significant and the result outcome is, relevant, dependable, and acceptable for evaluating the contributions of bank lending to Nigeria's economic performance.

The sign of the estimated parameters was used to determine the test for the economic or theoretical relevance of the parameters; nonetheless, it indicated that banks' lending (BL), money supply (MS₂), monetary policy rates (MPR), and exchange rate (EXR) in Nigeria were all positively indicated. Thus, it implies that banks' lending (BL), money supply (MS₂), monetary policy rate (MPR) and exchange rate (EXR) positively contributed to Nigeria's productivity growth during that time under investigation neglecting the insignificant implications of inflation rate. In respect to a priori expectation, it is concluded that the results are in alignment and consistent with the economic a priori expectation of positive relationship respectively.

The findings outcome from the study reveals that the good economic achievement results in a reduction in bank loan growth and a decrease in inflation rates during contractionary monetary policy regime and that the expansionary monetary policies leads to an increase in the volume of credit and thus strengthening the banking sector towards increase lending capacity to investors for investment purpose which has an overall contributory effects on economic performance during economic recession or spiral inflation. The model assumes that the dependent variable and the predefined independent variables have a linear correlation. The hypothesis indicated that banks' lending positively and significantly contributed to economic performance in Nigeria under the study time as evidenced by the significant effects of monetary

policy rate and banks' lending on economic performance. The model was shown to be relevant in the regression analysis, and its parameter estimates performed as predicted, revealing that monetary policy had the largest impact on the contribution of banks' lending to economic performance.

CONCLUDING AND RECOMMENDATIONS

Monetary policy as a way through which the Central Bank of Nigeria control the activities of money deposit banks have been x-rayed and the effects which these measures have on the contributions of banks' lending towards economic performance have also been critically reviewed and examined. The study applied ordinary least square regression analysis on the specified variables in the model. Evidence from the model expressly found a positive contribution of banks' lending to economic performance in Nigeria while inflation rate contributed positively but insignificant to bank lending and economic performance in Nigeria.

This implies that any policy formulated by the CBN monetary authorities significantly affects the lending contributions of DMBs in Nigeria and that the findings revealed that DMBs is in submission to the CBN's monetary changes from the result. Hence, this affirms to the fact that banks are pivotal and engine drive towards economic performance. According to the report, monetary authorities should establish a favourable interest rate policy to encourage individuals to save for investment reasons. Nigeria's banks should be dedicated to the purpose of price stability, as well as upgrading regulatory and supervisory frameworks, in order to ensure a robust financial industry and effective intermediation.

It is recommend that the CBN needs to supervise thoroughly the banks' activities to enable them comply with all the legal regulatory frameworks and monetary policies issued by the CBN which is important for the soundness of the financial sector. Not that alone, the expansion of commercial banking industry should be dependent on the supervisory capabilities of the regulatory authorities and availability of trained, experienced manpower to match such supervision. Furthermore, the design of monetary policy and its implementation should be made in such a way that the conflict of target is avoided.

AREA OF FURTHER RESEARCH

The findings of this study open possibilities for further research in areas of the distortion of non

financial intermediaries on monetary policy operations in Nigeria. Since the informal loan markets contribution will have positive or negative effects on monetary policy mechanism applied in the economy.

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