

The Impact of CBN Monetary Policy on the Survival SMEs in Nigeria

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Abstract

The purpose of this study was to determine how the CBN's monetary policies affect Nigerian SMEs' ability to survive. To investigate the data properties, a number of tests were run, including the unit-root test, and descriptive statistics. The explanatory variables and the dependent variable were tested for the presence of time-varying volatility and leptokurtosis using descriptive statistics. The relationship between the variables over the long and short terms was further examined using the Augmented Dickey Fuller (ADF) unit root test. Co-integration testing was done to confirm the outcome of the unit root test and to determine whether there was a long-term relationship between the variables. The findings indicate that whereas lending interest rates are negatively correlated with SME growth, money supply, commercial bank loans and advances, and bank reserves are positively correlated with SME growth. The study came to the conclusion that monetary policy is crucial to the success of SMEs in Nigeria. The consequence is that for SMEs to survive in Nigeria, the interaction of these factors is crucial.

Introduction

More and more, it is believed that Small and Medium Scale Enterprises (SMEs) greatly support the economies of several countries. As a result, governments all over the world concentrate on the growth of the SME sector to encourage economic growth. The Small and Medium Scale Enterprises sub-sector, which employs over 80% of all Nigerian workers, is one of the major forces behind economic development. SMEs are productive businesses that work to turn raw materials into completed goods. SME development is often referred to as the economic growth engine of every country. The sector's main advantage is its capacity to hire workers at low capital costs. Compared to large companies, SMEs have a substantially higher labor intensity.

Monetary policy is one tool for boosting the performance of SMEs. Monetary policy is one of the macroeconomic management techniques used to drive outcomes in the real economy in the desired direction. Miftahu (2019) defines monetary policy as the use of various tactics with the intention of regulating the value, supply, and cost of money in accordance with the projected level of economic activity. The promotion of stable prices, sustained output, and employment are the fundamental aims of monetary policy. According to macroeconomic theory, changes in interest rates will have an impact on the real sector of the economy through changing the cost of capital and investment in the productive sector. Similar to how fiscal policy can affect economic output, monetary policy can do so through a variety of channels, including interest rates, credit, asset prices via exchange rates, equity, and housing prices. This is crucial because, for some economic sectors, tighter monetary policy, for instance, may be seen as excessive.

Small and medium-sized businesses (SME) are regarded as the foundation of industrial development and play a critical role in economic progress. Along with chances for job creation, SMEs support stronger industrial interlinkages and integration as well as effective strategies for reducing rural-urban migration.

However, SMEs in Nigeria have not fared as well as anticipated and have thus yet to contribute significantly to economic progress.

For small enterprises, getting access to loans is a crucial issue. These tiny businesses won't likely be able to maintain production, create new goods and services, or expand to meet demand without enough funding. The productivity and market size of SMEs must continually increase in order for them to advance and succeed. However, achieving these goals largely depends on the addition of capital, which is frequently only available from well-established financial institutions. Small business failure is commonly attributed to a lack of liquidity. SMEs may turn to bank loans, trade credit, and unofficial sources of funding such as personal savings and loans from family and friends as an alternative to credit for business operations and expansion. SMEs turn to finance sources in order to obtain bigger credit volumes. The problem, though, is that lending to SMEs is prioritized by financial institutions as a high-risk investment. SMEs face additional difficulties in meeting the paper requirements of the majority of financial institutions by providing reliable documentation of their business operations and financial data. When SMEs are given access to credit facilities, the cost of the borrowing—represented by the interest rate—can be disastrous. Most SMEs choose to start small instead than taking out commercial loans with high interest rates in order to avoid the difficulties that come with being unable to pay back debts.

Due to the risky nature of their (SMEs') activities, banking institutions charge relatively high interest rates on credit extended to them. Due to impending challenges in the SME sector, which are primarily caused by limited access to credit from sources other than credit from financial institutions with high interest rates, SMEs must decide whether to rely on their own savings, savings from their families and friends, loans from friends, government and donor support of financial institutions, or their own savings. There have been claims made by those who believe that SMEs' demand for financing is set regardless of the level of interest rates. The level of interest paid on credit and the ability of the majority of SMEs to afford the credit have both direct and indirect linkages, according to their book on the assessment of current financial prospects and their influence on capital structure.

The government launched a number of steps to advance this economic sector in response to this unsettling circumstance. The CBN and the Nigeria government's actions to extend credit services to the real sector of the country are essential for supporting SMEs. Among the most recent CBN efforts are the 500-billion-naira power and manufacturing facility and the Two hundred-billion-naira facility to support the SMEs Credit Guarantee Scheme. It aims to increase manufacturers' and SMEs' access to loans in Nigeria. The scheme's main goals are to create jobs, industrialize the Nigerian economy, provide access to financing for SMEs and manufacturers, and hasten the growth of SME and industrial sectors of Nigeria's economy through the provision of guarantees. Despite government initiatives in Nigeria to support small, medium, and big businesses, SMEs have not exactly met expectations. Numerous people, organizations, and employees have made numerous justifications for the reasons SMEs are unable to live up to what they expected in light of the performances of the industries. The most justifications are completely subjective and are not supported by any evidence (Sani et al., 2009).

Research Objectives

Examining how CBN monetary policy affects SMEs in Nigeria is the main goal of this study.

The specific objectives are:

- To investigate the effect of CBN money availability on Nigeria's SMEs growth.
- To investigate the influence of bank loans on expansion and development of Nigeria's SMEs businesses.
- To look at how interest rates on loans affect the development of Nigeria's SMEs.
- To look into how bank reserves, affect the development of Nigeria's SMEs.

Research Hypotheses

H₀1: The growth of Nigeria's SMEs businesses is not significantly impacted by the CBN money supply.

H₀2: In Nigeria, bank credits do not significantly influence the growth and development of SMEs businesses.

H₀3: The growth of SMEs in Nigeria is not influenced by the interest rate that is paid on credit.

H₀4: In Nigeria, the growth of SMEs businesses is unaffected by bank reserves.

Literature Review

The Keynesian Theory

In 1936, Keynes put out this concept in contradiction to two core tenets of the standard theories of loanable money and quantity. Interest rates have a significant impact on monetary policy, according to Keynesian economists. The Keynesian transmission mechanism states that when the money supply increases, the interest rate decreases, which encourages individuals to keep more money on hand. Accordingly, a drop in interest rates may boost investment. Improved investments also result in higher revenue or output thanks to the multiplier, which might stimulate the economy. Therefore, there is an indirect impact on economic activity by monetary policy via affecting interest rates and investment. Since interest serves as an indirect link between monetary policy and fiscal demand, the Keynesian transmission mechanism is distinguished by a meticulous sector-by-sector building up of aggregate demand and a clear characterization of the portfolio adjustment process. The Keynesian monetary mechanism, to put it simply, emphasizes the significance of money while also incorporating an indirect link between money and aggregate demand through the interest rate, as graphically depicted below:

More analytically speaking, If the economy is initially in equilibrium and the Central Bank (CB) buys government securities on the open market, this open market operation (OMO) will boost bank reserves and the reserve requirements of commercial banks. The bank then uses fresh loans or other methods of

expanding bank credit to bring the ratio back to the desired level. These new loans generate further demand deposits, expanding the money supply. The overall level of interest rate (r) declines as the money supply increases. The performance of commercial banks is impacted by the declining interest rates, which in turn encourages investment given businessmen's anticipated profits. Following rounds of final demand spending by the GDP are increased by a multiple of the original shift in investment as a result of the induced investment expenditure. On the other side, a decrease in money supply results in a rise or increase in the general level of interest rate (R), which boosts the profitability of commercial banks.

Monetarism Theory

This theory, which Milton first proposed in 1945, focuses on the macroeconomic implications of a country's money supply and central banking system. In addition, theory suggests that the key mechanism for controlling economic activity is the supply and demand for money. The monetarist economists understand that money can be used to replace a wide range of financial and real assets rather than simply a small class of financial assets. In an equilibrium condition, a rise in the money supply causes the actual percentage of money to be higher than the intended proportion. The monetarist theory of the money transmission mechanism can be summed up symbolically as follows:

The core of the monetarist case is the traditional quantity theory of money. Changes in the money supply will have a direct influence on prices, production, and income if the rate of money circulation is constant. According to this view, monetary authorities should only concentrate on preserving price stability in order to preserve the health of the whole economy because an excessive expansion of the money supply will always result in price inflation. According to monetary theory, the money supply should be controlled to expand in tandem with the potential expansion of the GDP. This will stabilize prices and guarantee steady economic growth with little inflation. According to monetarist theory, alterations in a country's money supply encourage economic growth. As a result, it is generally accepted that any and all changes within a given economic system, such as a change in interest rates, are due primarily to changes in the money supply. The ultimate goal of monetarist policy, which is implemented to control and foster economic growth in a nation, is to gradually and gradually expand the domestic money supply.

Empirical Review

Udoh et al, (2018) inspected the influence of Nigeria's monetary policies on SMEs' growth. The findings indicated that there is no statistically significant association between the growth of SMEs in Nigeria and the exchange rate or inflation, however there is a marginally significant association between the growth of SMEs in Nigeria and the interest rate (INR).

Otugo et al, (2018) studied how small and medium-sized businesses affect Nigeria's economic expansion. According to the study's analysis, small and medium-sized businesses, government spending on small and medium-sized businesses, job creation, commercial bank credit to small and medium-sized businesses, and lending rates to small and medium-sized businesses all contribute to Nigeria's economic

growth. In Nigeria, corruption has a detrimental effect on economic expansion. All of the explanatory factors, however, have a big impact on Nigeria's economic development.

Aminu et al (2018) used time series data ranging from 1986 to 2016 to examine the impact of small and medium-sized firms on Nigeria's economic growth. The study's findings demonstrated that small and medium-sized firms in Nigeria contribute favorably to the development of the Nigerian economy by showing a positive and substantial association between production growth and small and medium-sized enterprises.

Isola and Mesagan, (2018) focused on how monetary policy affected the performance of Small and Medium Enterprises (SMEs) in Nigeria, Ghana, and Gambia, three West African nations, from 1981 to 2016. It was discovered that, during the course of the time, the output of SMEs was negatively impacted by the private sector's access to credit, the rate of inflation, and the exchange and interest rates. Only the interest rate, out of all the monetary policy measures, had a direct impact on how well SMEs performed in Ghana, but the exchange rate had a favorable impact on SMEs' production in the Gambia. As a result, it can be said that none of the three countries' monetary policies were conducive to the success of the SMEs sector in West African nations.

Ogbuji et al, (2018) focused on using time series data from 1980 to 2016 to examine how SMEs in Nigeria have affected growth. The study's approach included the OLS, co-integration test, and ARCH test. Long-term, the study's findings showed that whereas investment has a positive and considerable impact on real GDP per capita, exchange rate has a positive but small effect. More specifically, while interest rates have a negative but large impact on growth, labor force has a positive and significant impact.

Ufoeze et al, (2018) studied how Nigeria's monetary policy affected economic expansion. The study demonstrated that there is a long-term link between the variables. The main conclusion of this study also demonstrated that investment, interest rates, and monetary policy rates have negligible positive effects on economic growth in Nigeria. However, the availability of money significantly benefits Nigerian economic progress. The GDP of Nigeria is significantly impacted negatively by exchange rates.

Afolabi et al, (2018) investigated the connection between deposit money, banks, loans, and advances in Nigeria and monetary policy instruments. The results showed that structural modifications to the monetary policy framework had a favorable, considerable influence on the loans and advances made by Nigeria's deposit money banks. Additionally, the results showed a two-way association between MPR and loans and advances made by deposit money banks in Nigeria. MPR has specifically been found to be a key factor in Nigerian Deposit Money Bank advances.

Onwuteaka et al, (2019) explored the impact of Nigeria's monetary policies on economic growth. The study's other factors were all shown to be statistically unimportant when it came to explaining the growth rate of the Nigerian economy, according to the findings. It was discovered that the money supply, credit interest rates, infrastructure, and foreign debt are all statistically significant factors in predicting their effects on economic growth. The research recommends, among other things, that in order for monetary

policy measures in the Nigerian economy to be effective, the Central Bank of Nigeria be given total autonomy over its monetary policy tasks.

Miftahu, (2019) studied the Nigerian economy's monetary and fiscal policies from 1980 to 2017 Using the OLS technique and the cointegration test, the findings revealed that both monetary and fiscal policy had a positive and significant influence on economic growth. Further findings revealed that for the time period under review, Nigeria's monetary policy was more successful than its fiscal policy.

Shobande, (2019) investigated the potential influence of transitioning from direct to indirect monetary policy on Nigeria's industrial evolution. The results of long-run estimations showed that domestic credit, interest rates, and trade balance had positive effects on industrial production, whereas money supply, inflation, and exchange rates have negative effects on industrial growth. The result of the short-run dynamics showed that there was a negative correlation between changes in industrial production and changes in the indirect monetary policy (interest rate, money supply, domestic credit, and exchange rate) in the preceding (first and second lagged) periods.

Model Specification

This model was developed to assess how Nigerian monetary policy affected the survival of SMEs. The goal is to evaluate the impact of monetary policy on SME growth. The model is created and put forth using the following methodology:

$$\text{SMEGR} = f(\text{M2}, \text{CBLA}, \text{LNDR}, \text{BR}) \dots\dots\dots (3.1)$$

Where

SMEGR	-	SMEs Growth (Wholesale & Retail trade output as % of GDP)
M2	-	Money Supply (Current LCU)
CBLA	-	Commercial Bank Loan and Advances (N' Billion)
LNDR	-	Lending Interest Rate (%)
BR	-	Bank Reserve (N'Billion)

$$\text{SMEGR} = a_0 + a_1\text{M2} + a_2\text{CBLA} + a_3\text{LNDR} + a_4\text{BR} + u \dots\dots\dots (3.2)$$

The variables will be transformed to their natural logarithms to eliminate any serial correlation and to normalize the variables.

$$(\text{LN})\text{SMEGR} = a_0 + a_1\text{LN}(\text{M2}) + a_2\text{LN}(\text{CBLA}) + a_3\text{LN}(\text{LNDR}) + a_4\text{LN}(\text{BR}) + u \dots\dots (3.3)$$

Techniques of Analysis

To investigate the impact and potential relationships between the variables, the study uses the OLS regression technique. The multivariate regression model is regarded as a crucial strategy for illuminating the trend of financial indicators. The model is used to describe how the variables interact and to determine the degree of variance to which each monetary and fiscal variable may account for the trends in SME growth over the specified time period. An equation describing the connection between the independent variable(s) and the dependent variable is produced using the OLS regression methodology.

Discussion Of Findings

Table 1: Summary Statistics Output

	SMEGR	M2	CBLA	LNDR	BR
Mean	27.34912	27.36507	26.85686	17.75751	25.13441
Median	27.60991	27.47022	26.81614	17.56916	25.67170
Maximum	30.71835	31.04491	31.77577	31.65000	28.54186
Minimum	23.24851	23.44712	22.87304	8.916667	20.50660
Std. Dev.	2.541623	2.597031	2.797330	4.842715	2.713022
Skewness	-0.275904	-0.081020	0.065207	0.209404	-0.407958
Kurtosis	1.694991	1.606760	1.656912	3.690265	1.751019
Jarque-Bera	3.178606	3.115010	2.883079	1.032121	3.523980
Probability	0.204068	0.210661	0.236563	0.596867	0.171703
Sum	1039.267	1039.873	1020.561	674.7853	955.1076
Sum Sq. Dev.	239.0143	249.5490	289.5270	867.7197	272.3381
Observations	38	38	38	38	38

The table shows the descriptive statistics of the variables showing the mean, maximum, minimum, skewness, kurtosis of the variables. The mean of SME growth, money supply, commercial bank loan and advances lending interest rate and bank reserves is 27.34912, 27.36507, 26.85686, 17.75751 and 25.13441 respectively. The variables have respective minimum values of 23.24851, 23.44712, 22.87304, 8.916667, 20.50660 and maximum values of 30.71835, 31.04491, 31.77577, 31.65000, and 28.54186.

The skewness of Skewness measures the degree of distortion from the normal distribution is -0.275904, -0.081020, 0.065207, 0.209404 and -0.407958 respectively. This shows that SME growth, money supply and bank reserves are negatively skewed while commercial bank loans and advances are positively skewed.

Unit Root Test

Table 2: Unit Root Test Result

Variable	t*	ADF Critical Value	Status	t*	ADF Critical value
SMEGR	-2.945842	-1.651832	I(1)	-2.945842	-3.569308
M2	-2.945842	-0.850345	I(1)	-2.945842	-3.265959
CBLA	-2.943427	0.578011	I(1)	-2.945842	-6.236657
LNDR	-2.943427	-2.492058	I(1)	-2.945842	-6.794233
BR	-2.943427	-0.942150	I(1)	-2.945842	-4.578185

The Augmented Dickey Fuller (ADF) unit root test results, which are presented in Table 2. that none of the variables are stationary at levels [I(0)]. However, SME growth SMEGR, Money Supply (M2), Commercial Bank Loan and Advances (CBLA), Lending Rate (LNDR) and Bank Reserves (BR) were reported to be stationary at first difference [I(1)].

Table 3: Ordinary Least Square (OLS) Test

Dependent Variable: LOG(SMEGR)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
M2	.945987	.125935	7.511691	.0000
CBLA	.040464	.119407	0.338870	.7368
LNDR	-.022155	.011692	-1.894873	.0666
BR	.085497	.085470	1.000311	.3242

Table 4.4 above shows the result of the ordinary least square test of the impact of monetary policy on the survival of small and medium scale enterprises in Nigeria. The probability value showed that money supply and lending interest rate are statistically significant at 1% and 10% respectively while commercial bank loans and advances bank reserves are statistically insignificant. Despite the probability values, the coefficient of the variables shows that money supply, commercial bank loan and advances and bank reserves are positively related to SME growth while lending interest rate is negatively related to SME growth.

The implication of the coefficient is that 1% increase in money supply will increase SMEs growth by 94%. This is so because an increase in the money supply has two main effects: it lowers interest rates, which encourage investment, and it gives consumers more money, which makes them feel wealthier and encourages consumption. A nation's economy's total amount of cash and other liquid assets is known as its money supply. Cash and deposits that are practically as easily usable as cash are roughly included in

the money supply. So, in response to rising sales, business organizations boost production and place additional orders for raw materials. The expansion of commercial activity enhances the demand for capital goods and for labor, as well as for both.

The coefficient of commercial bank loans and advances is 0.040464. This shows that a % increase in commercial bank loans and advances will increase SMEs growth by 4%. Many small businesses rely on credit, such as bank loans and advances, to fund their operations. Small firms might obtain a loan to cover their operating expenses until their revenue reaches a specified level. A bank loan may provide short-term funding to help a firm start out and expand.

The coefficient of bank reserves is 0.085497. This shows that a % increase in banking reserves will increase SMEs growth by 8.5%. This is not in line with the a priori expectation. According to Okolo, (2015), bank reserves should have a detrimental effect on the growth of SMEs. Bank reserves are the minimum amounts of cash that financial institutions are required to have on hand in order to comply with central bank standards. The bank is unable to lend the money, but it is required to retain it in the vault, either locally or at the central bank, in case there is a sudden surge in demand for withdrawals.

The lending interest rate coefficient is -0.022155. According to this, a 1% rise in lending interest rates will result in a 2.2% decline in SME growth. This is consistent with the findings of Afolabi (2013) that the growth of SMEs is indirectly influenced by interest rates. Olukayode and Somoye (2013) stated that while interest rates are low, businesses are able to borrowing money. Low-interest loans can support business development and increase profitability since businesses can make enough money from new ventures to pay the loan interest and have money left over for profits.

Conclusion And Recommendation

After examining how monetary policy affects the development of SMEs businesses in Nigeria, it has been determined that monetary policy is crucial to SMEs' success in that country. The consequence is that for SMEs to survive in Nigeria, the interaction of these factors is crucial.

The following suggestions are made to improve the performance of SMEs in Nigeria in light of the study's findings:

1. Commercial banks should offer softer loans to this significant sector of the economy and loosen their strict policies for the provision of credit to SMEs. Interest rates on credit facilities provided to SMES should also be dramatically cut. This will have a significant impact on the sector's growth in terms of commercial bank credit to SMEs.
2. The monetary policy should support an expansionary monetary policy because the money supply in Nigeria is strongly and favorably related to the growth of SMEs. Money will move across the economy more as a result. As excessive money circulation could result in a higher interest rate and inflation, the expansionary monetary policy should be properly maintained.

3. Lastly, CBN must watch out for either excessive or insufficient regulation. A highly regulated environment for monetary policy, where restrictions on monetary expansion, credit policies, and interest rate ceilings are the norm, would have negative economic effects and make it difficult for Small and Medium Scale Enterprises to obtain financing for innovative projects and productive endeavors.

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Declarations

Competing interests: The author declare no competing interests.