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The Influence of Bank Credit Financing on the Growth of SMEs in Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

This study examines the impact of bank credit financing on the growth of Small and Medium Scale Enterprises (SMEs) in Nigeria. It assesses the relationship between bank credit variables such as bank loan, savings and lending rates on SME growth. The study population was the SMEs in Nigeria, and employed secondary data obtained from the Central Bank of Nigeria's statistical Bulletins over a 27-year period (1992 – 2022). An ex-post facto research design was employed to determine the attributed of the quantitative research. The study employed the auto-regressive distributed Lag length (ARDL) to determine the long run and short-run relationship between the dependent variable and independent variables. The findings reveals that bank credit to SME's has positive insignificant effect on SME's growth. Savings and tine deposit has positive significant effect on SME's growth. Lending rate has positive insignificant effect on SME's growth.
Therefore, the bank should encourage savings and loans to provide adequate financing for SMEs expansion, which will thus have a significant effect on their growth.

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Keywords: Bank credit; commercial bank loan; savings; SMEs growth.

1. INTRODUCTION

"Small and Medium Enterprises (SMEs) are recognized all over the world as backbone of modern economies because they make major contributions to global economic growth and sustainable development through employment generation, poverty alleviation, wealth creation and food security" [1,2]. "It is the recognition of the important roles played by SMEs that has resulted in increased attention and education on the approach to develop and sustain a viable SMEs sector" [3]. "It is a known fact that bank credit plays a major role in the development of the economy. Small and Medium Scale Enterprises (SMEs), being an engine growth of the economy, need this credit for capital accumulation which in turn promotes performance and economic growth" [4].

According to Olowookere, et al., [5] "SMEs are vital to the economic growth and development of many developing nations, including Nigeria. They argue that a focus on SMEs can lead to job creation, skill development, and backward integration, while also fostering technological innovation. SMEs play a critical role in generating employment, promoting industrialization in rural areas, utilizing local resources, and redistributing income among the poor". Similarly, Ofeimun, et al., [6] "emphasize that SMEs are recognized as the backbone of private sector development and a key driver of partnerships, positioning them as essential contributors to sustainable economic growth and development in Nigeria" [7].

"However, SMEs in Nigeria still encounter challenges such as stringent conditions on bank credit, maturity mismatched, inadequate collateral securities, faulty implementation and monitoring of fund disbursed by the government among others and hence handicapping the aim of the policies" [6,4].

The interest rate charged on the borrowed funds reflects the level of the risk that the lender undertakes when securing the loan. Kakuru [8] "argues that Bank credit financing includes both secured and unsecured loans [9-13]. He further says that security for the loans involves a form of collateral as an assurance for the loan. Therefore if the debtor defaults on the loan, that collateral is forfeited to satisfy payment of the debt". "Growth of small and medium enterprises SMEs involves increased level of output, increased number of employee performance, increased level of creativity and innovation, industrial restructuring and wealth generation in both developing and developed economies Nigeria Investment Report" (NIA, 2008).

"In Nigeria, The SME sector is the backbone of major developed economies, as well as important contributors to employment, economic and export growth. In South Africa, SMEs account for 91% of businesses, 60% of employment and contribute 52% of total GDP. In Nigeria, SMEs contribute 48% of national GDP, account for 96% of businesses and 84% of employment. According to the Nigeria Bureau of Statistics, small and medium scale enterprises (SMEs) in Nigeria have contributed about 48% of the national GDP in the last five years. With a total number of about 17.4 million, they account for about 50% of industrial jobs and nearly 90% of the manufacturing sector, in terms of number of enterprises. Small and medium enterprises are businesses which are independently owned and operated by a few individuals. They can be defined in terms of sales volume and number of employees in the business indicated by structural development, profitability and employment levels. They mainly engage in buying produce, market vending, catering and confectionery, shop keeping, second hand clothing, health/herbal services, secretarial services, telephone services, handicraft, transport and many others Nigeria Bureau of Statistics report" (NBOS, 2004).

"An obstacle limiting the development of SMEs in Nigeria is the death of infrastructural facilities and financial sources for the sub sector. In most cases, the operators often find financing options particularly banks inaccessible. This phenomenon has pushed many operators to explore other alternative funding sources with high interest rate and other implications. In response to that, government came with various financial windows for the SMEs through the Central Bank of Nigeria. These include Micro, Small and Medium Scale Development Fund (MSMSDF), microfinance banks, direct loans from state governments among many other financial windows. Over a short period, it has yielded significant improvement in their activities" [14].

"Proper management of debts lead to growth and smooth operation of businesses and poor management of debts will not only cripple the ability of commercial banks and other lending institutions to offer credit facilities to small and medium enterprises but threatens their profitability and survival" (UIA Report, 2008). Odey & Onwuka (2015) "saw the problem facing SMEs as inadequate funding on the part of the commercial banks and other financial institutions and poor management on the part of small business owners".

"Despite the fact that the Nigerian government implemented different policies, starting from the adoption of the Structural Adjustment Programme (SAP) in 1986, establishment of Bank of Industry (BOI), Small Scale Industries Credit Scheme (SSICS), World Bank Small and Medium Enterprises Loan, Refinancing and Rediscounting Facility (RRF) of the Central Bank of Nigeria, Small and Medium Enterprises Equity Investment Scheme (SMEEIS), Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) – [4]. Furthermore, the N200 billion Small and Medium Scale Enterprises Guarantee Scheme (SMECGS) was instituted by the CBN in 2010 and, in 2013, the MSME improvement fund with share capital of N220 billion. Subsequent interventions were industry specific such as N50 million textile intervention fund, agricultural and manufacturing sectors' support facility (RSSF), etc" [15].

The Small and Medium Industries Equity Investment Scheme (SMIEIS) which is one of the policy implemented by Nigerian government, is a voluntary initiative of bankers" committee which requires all licensed banks to set aside 10 percent of their profit before tax (PBT) for equity investment in, and promotion of SMEs [16-24]. Despite the existence of programmes and policies on financial support for SMEs in Nigeria, very few small and medium scale businesses receive financial assistance (credit) when they need it. This has constrained the development of their businesses and hence their performance. Mambula [25] found that "75 percent of small firms he studied in Nigeria considered lack of financial support as a major constraint militating against the growth of small business. It was found that small business owners consider procedures for securing credit from banks unwieldy and the acceptable collateral for such loans are imprudent".

On the other hand, banks claim that most small business owners that apply for loans do not present acceptable investment or business plan and viable feasibility study [26-31]. With regard to the un-credit worthiness of most SMEs as viewed by the banking system, this study has become necessary to ascertain how banking credit financing to the small and medium scale enterprises has imparted on SMEs growth in Nigeria.

2. THEORETICAL REVIEW

2.1 Financial Intermediation Theory

"Financial Intermediation Theory plays a crucial role in understanding the relationship between bank credit financing and the growth of SMEs in Nigeria. This theory emphasizes the functions of financial intermediaries, such as banks, in reducing information asymmetry, facilitating transactions, and allocating resources efficiently within an economy. These intermediaries act as a bridge between savers and borrowers, ensuring that funds flow from surplus units (savers) to deficit units" (borrowers, such as SMEs) [32,2]. (Allen & Santomero, 1997). "In Nigeria, where SMEs often face significant barriers in accessing formal credit due to perceived risks, information asymmetry, and high transaction costs, banks play a pivotal role as financial intermediaries. Through their expertise in risk assessment, monitoring, and financial intermediation, banks can provide SMEs with access to the capital necessary for growth and expansion. SMEs are typically constrained by limited internal resources and often do not have the collateral or established credit history that larger firms do [33-39]. As a result, they rely heavily on external financing, with bank credit being one of the most important sources" [40,2] (Anigbogu, et al., 2015). Financial intermediation theory explains how banks mitigate the risks associated with lending to SMEs by assessing their creditworthiness, monitoring loan performance, and creating financial products tailored to the unique needs of small businesses. By providing loans and credit lines to SMEs, banks enable these firms to invest in new technologies, hire additional staff, expand operations, and enter new markets. This infusion of capital is often critical to the growth and competitiveness of SMEs, which contribute significantly to job creation and economic development in Nigeria. The efficient allocation of resources by banks thus accelerates the growth of the SME sector. However, the success of this relationship depends on the effectiveness of the financial system, regulatory frameworks, and the willingness of banks to extend credit to SMEs. Challenges like high interest rates, inadequate collateral, and lack of financial literacy among SME owners can limit the full potential of financial intermediation in promoting SME growth in Nigeria. In conclusion, financial intermediation theory underscores the importance of banks in facilitating SME growth by providing them with the necessary financial resources to expand, compete, and thrive in the Nigerian economy [41-46].

Financial intermediation theory was propounded by an early economist, Schumpeter (1912), "who described financial intermediation as innovation finance. He further opined that this provided the entrepreneurs an access to funds which increased their expectations and new horizons to possible alternatives, thereby enhancing their performance. Innovation as an attribute of entrepreneur contributes to economic development". McKinnon and Shaw (1973) as cited in Imoughele and Ismaila (2013) "opined the essence of the role of financial intermediation as an opportunity of inducing real growth through finance".

In 1973, Schumpeter stressed the role of credit in financing innovation as a key factor for performance and economic development. In a related study, Bencivegan and Smith (1991) "emphasized the role of banks as a financial intermediation agents by channelling savings received from surplus units to productive investments through credit advances. Hence, without credit, the innovation opportunities may be handicapped and can hinder performance and economic growth. Therefore, it was concluded that non-availability of bank credits can be a hindrance to the performance of entrepreneurs".

2.2 Finance-Growth Theory

Finance-Growth Theory emphasizes the crucial role of financial development in driving economic growth. The theory posits that efficient financial systems, including banks, facilitate the mobilization and allocation of resources, fostering investment, innovation, and productivity, which are essential for economic expansion. In the context of SMEs in Nigeria, bank credit plays a pivotal role in linking financial development to the growth of these businesses. SMEs are critical contributors to Nigeria's economy, providing employment, fostering innovation, and promoting regional development. However, their growth is often hindered by limited access to finance. This is where Finance-Growth Theory becomes particularly relevant. According to the theory, a well-functioning financial system provides businesses, especially SMEs, with the capital they need to invest in operations, technology, and human resources, thereby promoting business expansion and economic growth. Banks, as financial intermediaries, play a vital role in this process by providing loans and credit facilities to SMEs. In Nigeria, where the SME sector often struggles with accessing formal credit due to high risk perception and insufficient collateral, the availability of bank credit becomes a key driver of growth. Finance-Growth Theory suggests that when SMEs can access external financing, such as bank loans, they can invest in expansion activities like upgrading infrastructure, purchasing new machinery, or expanding into new markets. These investments contribute directly to the growth of individual SMEs and, cumulatively, to the broader economic development of Nigeria. Moreover, the theory suggests a bidirectional relationship: as SMEs grow and contribute to economic development, the financial sector itself expands, becoming more robust and capable of offering diverse financial products. This cyclical relationship further supports the notion that financial development, particularly through bank credit, stimulates SME growth and contributes to long-term economic progress. However, challenges remain. High interest rates, bureaucratic loan processes, and underdeveloped financial infrastructure in Nigeria can impede the effective functioning of the finance-growth relationship. Addressing these barriers is essential to unlocking the full potential of bank credit financing in fostering the growth of SMEs and, by extension, economic development in Nigeria.

"Financial growth theory is a theory that was developed" by Berger and Udell [47]. "According to them, as a business matures over the years, its financial obligations and financing options metamorphose having more information available to the public. According to them, firms that are smaller, younger and possess more ambiguous information must depend on initial internal funding, trade credit, or a type of financing called angel finance. (Angel finance is one that occurs when an individual or organization provides a limited amount of financial backing for a start-up business with more favourable repayment plan). As the firm grows, it qualifies for acquiring both venture capital and midterm loans as sources of both intermediate equity and intermediate debt respectively. Further aging of the firm makes it to become bigger and less informational murky. This thus qualifies the firm to have access to both public equity and long term loans as sources of both long term equity and long term debt respectively. The capital structure of SMEs is thus very different from that of bigger firms because SMEs rely more on informal financial market which limits the type of financing they are able to secure. The SMEs initial use of internal financing leads to a peculiar state of affairs whereby capital structure decisions are heavily dependent on the limited financing options. Therefore, SMEs possess varying capital structures and are financed by various sources at different stages of their development" [47].

2.3 Pecking Order Theory

The pecking order theory is one that was developed by Myers Sanders in 1984. It implies that the financing requirements of firms (usually SMEs) are catered for in a hierarchical order. The initial source of funds is internally generated. As the amount of funds required is increased, the next source is via the use of debt. Further increase in the need of funds leads to sourcing for external equity. Thus there tends to be a negative relationship between profitability and external borrowing by small firms. This further implies that the debt equity mix of a firm should be heavily dependent on the hierarchical financing decisions over time.

This theory thus maintains that businesses organizations always prefer to use internal funds. If it is not available, the organization will prefer to use debt as an external source of fund before it considers equity financing. Therefore, by simply examining a firm's debt equity mix, one can have a general understanding on the health of that organization. When managers issue new shares, the public believe that the managers have concluded that the firm is valued more than its actual worth and as such they want to quickly utilize the opportunity. This leads to the investors valuing these new stocks lower than before. The theory also implies that older firms should have more funds available to promote growth since they have had more opportunities to accumulate internally generated funds i.e retained earnings.

2.4 Empirical Review

Ogbuji et al. [48] investigated the impact of deposit money bank lending on the growth of SMEs in Nigeria, using 34 years of data from the Central Bank of Nigeria's 2020 Bulletin. Through regression analysis, the study found that SME financing by deposit money banks had a positive and significant effect on Nigeria's economic growth. However, monetary policy rate, inflation rate, and interest rate had a negative impact on GDP, while credit to the private sector and SMEs positively contributed to real GDP growth. The study recommends that Nigeria's monetary authority should carefully review bank loans to ensure that funds reach private sector users with reduced reliance on collateral, boosting the economy. Additionally, the Central Bank of Nigeria (CBN) should work to lower interest rates and moderate the monetary policy rate to mitigate risks to SME and economic growth, particularly in light of the negative effects of COVID-19 on SMEs.

Olowookere et al. [5] explored the relationship between SME financing and sustainable economic growth in Nigeria. The study employed fully Modified Ordinary Least Square and Granger causality analysis after conducting pre-tests such as unit root and cointegration. Key findings include a negative but insignificant relationship between broad money supply and GDP growth, while commercial bank loans to SMEs had a positive and significant impact on GDP growth. Gross fixed capital formation and commercial bank credit to the private sector had an insignificant positive correlation with GDP growth. Additionally, a one-way causality was found from broad money supply to gross fixed capital formation and from GDP growth to commercial bank loans to SMEs. The study concluded that SME financing plays a crucial role in promoting sustainable economic growth, and commercial banks are motivated to lend to SMEs due to this growth. The authors recommended that policymakers prioritize SME financing to achieve sustainable economic growth, with the Central Bank of Nigeria implementing policies that direct commercial bank credit towards SMEs.

Ibrahim & Ndidi [49] examines into the effect of bank lending on the growth of selected small and medium scale business in Nigeria. The employed the qualitative and quantitative research design. The literature suggest a growing interest in a mixed approach following on from the argument that one is used to strengthen the other. The research is based on the qualitative and quantitative research design. The research questions were addressed. The primary data was collected from two hundred respondent from a total of four hundred respondent. The findings revealed that lending to SME's encourages self-employment there by reducing the rate of unemployment and crime in Nigeria.

Lawal et al., [50] "examine the effect of bank credit on the performance of small and medium enterprise in Nigeria. Specifically, the study evaluated the relationship between Deposit Money Banks' (DMBs) credit variables such as banking sector credit, lending rate and savings and time deposit on performance of the SMEs. The study's population was the SMEs in Nigeria. The study employed secondary data obtained from the Central Bank of Nigeria's Statistical Bulletins for a period of twenty-five years (1992-2016). The data obtained were subjected to fully modified least square regression analysis. Findings reveal that banking sector credit and savings and time deposits with DMBs have a positive and significant effect on SMEs performance at 5% significance level (with pv of 0.0006 and 0.0459, respectively). However, lending rate has a negative and significant relationship with SMEs performance at 5% significant levels (0.0351). Based on the findings, the study concluded that DMBs credits have significant effect on SMEs performance in Nigeria. Therefore, DMBs should keep interest rate at its minimum as this will enhance the provision of adequate finance to expand SMEs operation which will thus have a significant effect on the performance of this sector".

Ghulam and Iyofor [1] "examined the impact of firm and owner characteristics on the availability of bank credit to SMEs in Nigeria, using data from the World Bank Enterprise Survey. Their findings revealed that SMEs with financial statements, especially audited ones, are more likely to secure bank credit than those without. Medium-sized firms and higher-performing SMEs are also more likely to obtain credit compared to small and lower-performing ones. Additionally, firms with sole proprietors are less likely to receive credit than partnerships or corporations. The study supports the theory that reducing information asymmetry decreases perceived lending risks, making banks more willing to lend under such conditions".

Owolabi and Nasiru [51] investigated the relationship between deposit money bank credit to SMEs, socioeconomic performance, and economic growth in Nigeria. The study used Pearson's correlation to analyze the relationship between SME credit and unemployment, as well as SME credit and poverty, and employed Ordinary Least Squares (OLS) regression to examine the impact of SME credit on economic growth. Data from 1992 to 2015 was sourced from the Central Bank of Nigeria. The Pearson's correlation results showed a negative but insignificant relationship between SME credit and unemployment, and a negative, statistically significant relationship between SME credit and poverty. The OLS regression revealed that SME credit had a negative and highly significant impact on economic growth. Based on these findings, the authors recommended that the Nigerian government provide SMEs with training in risk management, improve infrastructure to lower operating costs, and equip deposit money banks with technology to better assess SME creditworthiness.

Nagaya (2017) and Taiwo, Ayodeji and Yusuf [52] "among many others have looked into the relationship between SMEs and economic growth and came up with different and conflicting results which call for further investigation. Besides that, it is observed that majority of the studies applied primary data in the case of Nigeria. There are very few studies that used time series data. Thus, the present study plans to undertake the anatomy of the relationship between SMEs activities and economic growth using dataset for Nigeria. The study goes beyond the existing studies in two ways: firstly, it has applied more recent time series data and secondly, it considers wide specification and robust econometric techniques. On the basis of that, it provides fresh insight to the existing literature on the relationship between SMEs and economic growth".

Ovat [53] investigated the impact of commercial bank credit on the growth of SMEs in Nigeria using co-integration and error correction methods. The study found that commercial bank credit had not significantly contributed to SME growth in Nigeria. To enhance the role of commercial banks in fostering SME development, several recommendations were made. These included improving access to credit for SMEs by lowering lending rates through monetary policy adjustments, avoiding the devaluation of the naira as it raises costs for imported materials and equipment, promoting the use of local raw materials to reduce exchange rate pressures, and expanding the number of commercial bank branches, especially in rural areas, to provide better access to financial services for SMEs.

Ojong, et al [54] "investigated the role of deposit money banks on the growth of SMEs in Yakurr Local Government Area of Cross River State, Nigeria. The study adopted survey research design, and further examined the degree of relationship between bank credit, multiple taxations and government policies on the growth of small and medium scale enterprises in Nigeria. The Pearson product moment correlation statistical technique was employed. The results revealed that bank credit had a significant relationship with the growth of SMEs. Multiple taxations and government policies were found to have significant effect on SMEs growth. The authors suggested deposit money banks should be encouraged to increase the volume of loanable funds to the SMEs, while elimination of multiple taxation, reduction in corporate taxes and the strengthening of government policy framework were recommended as these will impact significantly on the growth of SMEs in Nigeria".

Ayuba, & Zubairu [55] "analyze the impact of banking sector credit on the growth of small and medium enterprises (SME's) in Nigeria for the period of 1985 to 2010 using descriptive statistics. The study reveals that banking sector credit has significant impact on the growth of small and medium enterprises in Nigeria as it has positive impact on some major macro-economic variables of growth such as inflation, exchange rate, trade debts and so on. The study therefore recommends that financial lending institutions should relax the stringent conditions associated with credit facility in the funding of SMEs in Nigeria so as to encourage easy accessibility of loans which will help in improving SMEs financing and growth".

Uzonwanne [56] "analyses deposit money banks and financing of small and medium scale enterprises in Nigeria over the period of 1995 to 2012. The paper analyses data in pursuit of its objectives using descriptive statistics and finds from the analysis that deposit money banks in Nigeria have been lacking in the financing of small and medium enterprises activities. On the basis of the findings, the study recommended deposit money bank stability and sustainability such that the monetary authority should initiate policies that would redirect the channel of deposit money banks' credits so as to meet the borrowing needs of at least 65% of the medium and small scale enterprises in the economy. This it is argued will help to boost economic activities within the country because lack of capital retards investment".Ayuba & Zubairu [55].

3. METHODOLOGY

The study employed the ex-post factor research design. The study makes use of secondary data to determine the influence of bank credit on the growth of Small and medium enterprises in Nigeria. The time series data was sourced from Central Bank Statistical bulletin from the period of 1992 to 2022. The explanatory variables includes bank credit, lending rate and saving and time deposit while the dependent variables small and medium scale performance was measured with credit to small and medium scale enterprises

The model specification includes;

This study model is specified as below:

SMEP= (bank credit to SMEs, Savings and Time Deposit, and Lending rate) (1)

SMEP = (BCSME, STD, LNDR) (2)

$$SMEP = a_0 + a_1 BCSME + a_2 STD + a_3\ LNDR + \mu i$$

Restated as a logarithm

$$LnSMEP = a_0 + a_1\ LnBCSME + a_2\ LnSTD + a_3\ LnLNDR + \mu i$$

Where:

Ln = Natural Logarithm
SMEP= SMEs performance
BCSME= Banks' credit to SMEs
STD= Savings and time deposits
LNDR = Lending rate
a_0= the intercept/ constant
$a_1 - a_4$ = Slopes or coefficient of the explanatory variables
μi= error term

On the a priori expectation, it is expected that $a_1$and a_2 will be greater than zero, hence they will exert a positive influence on the SMEs performance.

4. FINDINGS AND RESULTS

4.1 Data Analysis

Table 1 revealed that the average loan and advances over the period in Nigeria between

1992 and 2018 was ₦32,799.97 million with a minimum loan of ₦10,747.89 and a maximum of ₦90,176.50. The average savings over the period in Nigeria between 1992 and 2018 was ₦4,133.52 million with a minimum loan of ₦43.43 and a maximum of ₦14822.20. Similarly, the average lending rate within the period was 18.56% with a minimum loan of 13.54% and a maximum of 29.85%. The average SME output for the selected period was ₦18,097.12 with a minimum of ₦7,572.64 and a maximum of ₦33133.4 billion. The Jarque-Bera statistics showed that all the data series for credit financing and SMEs output in Nigeria were normally distributed for further analysis.

Similarly, the p value of all estimates and results which represent the probability of observing a sample value as extreme as the value actually observed, given that the null hypothesis is true served as a guide for accepting/rejecting null hypothesis at various stages in the analysis by comparing it to significance level.

This study examined the unit root test on the selected variables using the root test and the results are presented below:

Table 1. Descriptive statistics

	Loans	Savings	Lending Rate (%)	SME Output
Mean	32799.97	4133.529	18.55889	18097.12
Median	25713.70	1316.957	17.95000	16310.52
Maximum	90176.50	14822.20	29.80000	33131.49
Minimum	10747.89	43.43880	13.54000	7572.640
Std. Dev.	21528.29	4892.845	3.160080	8550.337
Skewness	1.034751	0.878125	1.851854	0.346144
Kurtosis	3.533752	2.293213	7.432160	1.611403
Jarque-Bera	5.138695	4.031955	37.53168	2.708397
Probability	0.076585	0.133190	0.000000	0.258154
Sum	885599.1	111605.3	501.0900	488622.2
Sum Sq. Dev.	1.21E+10	6.22E+08	259.6387	1.90E+09
Observations	27	27	27	27

Source: Author's computation (2022) Using E-views 8

Table 2. Augmented Dickey Fuller (ADF) Unit Root Results

Variables	Level	Prob.	First Difference	Prob.	Stationarity
SME Growth	-6.759701	0.0000			I(0)
LogLoan	-1.730051	0.4051	-4.865453	0.0007	I(1)
Logsavings	-1.966421	0.2988	-3.781840	0.0088	I(1)
Lending rate	-5.982088	0.0000			I(0)

Source: Author's computation (2022) Using E-views 8

Table 3. Pairwise Correlation Matrix for the specified variables

	Log Loan	Logsavings	lendingrate	SME Growth
LogLoan	1.000000	-0.501282	0.309370	-0.484355
Logsavings	-0.501282	1.000000	-0.425121	0.921696
Lendingrate	0.309370	-0.425121	1.000000	-0.432799
SME Growth	-0.484355	0.921696	-0.432799	1.000000

Source: Author's computation (2022) Using E-views 8

Table 4. Auto-Regressive Distributed Lag (ARDL) Result

Dependent Variable: SME Growth				
Method: ARDL				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.***
SME Growth (-1)	0.458549	0.208752	2.196620	0.0394
LogLoan	0.002344	0.040125	0.058410	0.9540
Logsavings	0.883333	0.345785	2.554571	0.0185
lendingrate	-28.55455	359.4994	-0.079429	0.9374
C	6977.494	6997.963	0.997075	0.3301
R-squared	0.875393	Mean dependent var		18407.55
Adjusted R-squared	0.851658	S.D. dependent var		8563.095
S.E. of regression	3298.093	Akaike info criterion		19.21112
Sum squared resid	2.28E+08	Schwarz criterion		19.45306
Log likelihood	-244.7445	Hannan-Quinn criter.		19.28079
F-statistic	36.88235	Durbin-Watson stat		1.912240
Prob(F-statistic)	0.000000			

Source: Author's computation (2022) Using E- views 8

Table 2 presents the results of ADF unit root results for the levels of the annual time series data between 1992 and 2022. The results denotes rejection of the unit root hypothesis at the 5% level of significance. The ADF statistics were generated with a test for a random walk against stationary AR (1) with drift and trend with maximum lag of 6. The ADF Statistics were generated and it shows that SME Growth and Lending rate are stationary at level while Logloan and Logsavings are stationary at first difference which validate the deployment of (ARDL) Auto-regressive distributed Lag, which means the findings would not be spurious for policy recommnedations.

The Table.3 shows that the pairwise correlation matrix between each of the specified variables which revealed a negative association between loan & advances, lending rate and measures of SME growth. Similarly, a strong positive connections are observed between savings and SME growth. Having established the common features of the data obtained for analysis, the study proceed to data analysis and the result of Auto-Regressive Distributed Lag (ARDL) analysis is presented in the Table 4:

Table 4 shows the ARDL result coefficients, standard error, t-statistics and probability values for all the selected variables. The result coefficients shows the influence of specified measures of credit financing such as loans & advances, savings and lending rates. It is observed that a unit change in variable such as lending rates will result into a decrease in the level of SME growth in the long run. Similarly, it is observed that a unit change in variable such as loans and savings will result into an increase in SME growth in the long run. The Table 4 above shows the previous SME Growth (-1) has positive significant effect on SME Growth which implies that unit increase in SME Growth (-1) lead to 0.45 percent increase in SME Growth. Logloan has positive insignificant effect on SME Growth which implies that a unit increase in Logloan lead to 0.00 increase in SMEGrowth. Logsavings has positive significant effect on SMEGrowth which implies that 0.88 unit increase in Logsavings leads to 0.01 increase in SMEGrowth. Lending rate has negative insignificant effect on SMEGrowth which implies that a unit increase in Lending rate leads to -28.55 decrease in SMEGrowth.

4.2 Discussion of Findings

The findings of this study align with several empirical studies that emphasize the importance of credit financing for SME growth. The ARDL results indicate that certain credit variables have a significant impact on SME growth in the long run. Specifically, loans and savings positively contribute to SME growth, as evidenced by the positive and significant relationship between logsavings and SME growth. This finding is consistent with studies such as those by Ogbuji et al. [48] and Olowookere et al. [5], which also found that credit to SMEs fosters economic growth. The positive contribution of savings to SME growth suggests that higher savings mobilized by deposit money banks are a critical component in sustaining SME expansion. Conversely, the lending rate showed a negative, albeit insignificant, relationship with SME growth. This supports Olatunji et al. (2020) and Ibrahim

& Ndidi [49], who found that high lending rates create barriers to SME financing, thereby stifling growth. The negative impact of lending rates indicates that SMEs are sensitive to high borrowing costs, which is a challenge when access to affordable credit is limited. High interest rates not only reduce borrowing capacity but also discourage investment in growth-related activities. The findings on SME credit's effect on economic growth, specifically the positive role of loans, align with Lawal et al. [50], who found a significant relationship between deposit money bank credit and SME performance. However, the negative effect of lending rates in this study calls for concern, as it may hinder SMEs from playing their full role in driving economic growth. Additionally, the positive and significant effect of previous SME growth on current growth highlights the potential for SMEs to generate sustained growth when supported by favorable financial conditions. This aligns with Ghulam & Iyofor [1], who emphasized the role of financial statements and reducing information asymmetry in improving access to bank credit [57,58].

5. CONCLUSIONS AND RECOMMENDATIONS

This study demonstrates that credit financing, particularly through loans and savings, plays a significant role in promoting the growth of small and medium-sized enterprises in Nigeria. The ARDL results confirm that positive changes in loans and savings significantly enhance SME growth in the long run. The positive effect of savings mobilization on SME growth suggests that enhancing savings facilities could significantly boost SME performance. However, the study also reveals that high lending rates pose a challenge to SME financing, as they negatively impact growth. This finding corroborates existing literature that underscores the difficulties SMEs face in securing affordable credit.

The study highlights the importance of deposit money banks in the financing of SMEs and their ability to promote economic growth. The results suggest that efforts to improve SME access to credit should focus on reducing the lending rates, as high rates impede their ability to borrow and grow. The findings also suggest that previous growth in SMEs can lead to further expansion, indicating a self-reinforcing growth cycle when favorable financial conditions are in place. In summary, the study concludes that credit financing is essential for SME growth and overall economic development, but attention must be given to maintaining low lending rates to maximize the benefits of bank credit. Based on the findings of this study, several recommendations are put forward to enhance the role of credit financing in SME growth. First, policymakers and financial regulators, particularly the Central Bank of Nigeria (CBN), should prioritize reducing lending rates. Lowering the cost of borrowing will encourage SMEs to seek more loans, which will promote investment and expansion activities. This recommendation aligns with the study's results showing that high lending rates are detrimental to SME growth.

Second, banks should continue to strengthen savings mobilization efforts, as the positive relationship between savings and SME growth suggests that savings are a critical source of funds for expanding SME activities. Encouraging a culture of savings among both individuals and businesses will ensure a steady supply of credit for SMEs. Third, the government and financial institutions should invest in technologies and infrastructure that improve the creditworthiness assessment of SMEs. As highlighted by Ghulam & Iyofor [1], reducing information asymmetry can lower perceived risks and enhance SMEs' access to bank credit. Providing SMEs with the necessary financial training, particularly in risk management and preparing audited financial statements, can also improve their eligibility for loans. Finally, the study recommends that the CBN develop policies that reduce the reliance on collateral for SME loans, ensuring that more SMEs can access credit without stringent conditions. This recommendation is consistent with Ogbuji et al. [48], who argue that less reliance on collateral will boost the availability of credit to SMEs and support their growth. Expanding the branch networks of deposit money banks to rural areas could also provide SMEs in underserved regions with greater access to financing options. By implementing these strategies, Nigeria can create an enabling environment for SMEs to flourish, thereby contributing significantly to national economic growth.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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