

# Commercial Banks' Credit and SMEs Development in Nigeria: An Empirical Review

**DADA, Richard Mayowa**

Department of Economics, Kogi State University, Anyigba

P.M.B 1008, Anyigba, Kogi State, Nigeria.

Email: [M4goodlife@gmail.com](mailto:M4goodlife@gmail.com)

---

## ABSTRACT

*Access to credit is crucial for the growth and survival of Small and Medium-sized Enterprises (SMEs), this is because the ability of SMEs to grow depend highly on their potentials to invest in restructuring, innovation, etc. And all of these investments need capital, and therefore access to finance. However, the consistently repeated complaints of SMEs about their problem regarding access to finance is highly relevant constraint that endangers the development of the sector in Nigeria. It is on this basis that the study investigated the effect of commercial banks' credit on SMEs development in the country between 1992 and 2011. Secondary data was employed and the Ordinary Least Square (OLS) technique was adopted to estimate the multiple regression model. The estimated model revealed that commercial banks credit to SMEs and the saving and time deposit of commercial banks exert a positive influence on SMEs development proxy by wholesale and retail trade output as a component of GDP, while exchange rate and interest rate exhibit adversative effect on SMEs development. And in terms of the significance of the variables, using P-value as a test of evaluation; commercial banks' credit to SMEs and saving and time deposit of commercial banks were found to be significant factors enhancing SMEs development in Nigeria at 5% critical level. Therefore, emanating from the empirical findings, the study proffered among others that adequate savings should be mobilized from the public by emphasizing more on saving and that government should encourage banks to lend to SMEs by providing guarantee, interest rate subsidies and other incentives.*

**Key Words:** Deposit Money Banks, Economic Development, GDP, Investment, Enterprise.

---

## 1.0 INTRODUCTION

Small and Medium Scale Enterprises (SMEs) have been widely recognized by various governments of the world and among development economists as the main drive of economic growth and a crucial factor in promoting private sector development and partnership in a country.

According to the United Nations Industrial Development Organization (UNIDO) report of 2012, SMEs have a significant role to play in economic development. They formed the backbone of the private sector; they make up over 90 per cent of entrepreneurs of the world and account for 50 to 60 per cent of employment generation. They also play an important role in poverty alleviation.

In the words of Fashola (2013) "The SME sector in any nation is the main driving force behind job creation, export earnings, poverty reduction, wealth creation, income redistribution and reduction in income inequality." SMEs contribute to a more efficient allocation of resources. They tend to adopt labour intensive method of production and support the development and diffusion of entrepreneurship spirit and skills and helps in reducing economic disparity between rural and urban centers.

Nwosa and Oseni (2013) enunciated that the contributions of the SME sector to output growth and employment generation in United States and some Asian countries has helped in a long way in renewing the focus of economic planners and policy makers in Nigeria on the importance of the sector in aiding industrial growth and reducing the level of unemployment rate in the country. Thus, according to the National Bureau of Statistics (2013), the total number of SMEs in Nigeria is put at over 17 million.

However, Asaolu (2002) cited in Alalade et al (2013) maintained that SMEs whether starting ups or existing entities need capital either to be able to grow or expand operations. Capital can be in form of internally generated funds or external funds such as capital contributed of some types (Alalade et al, 2013). While noting that robust economic growth cannot be achieved without putting in place well focused programs to reduce poverty in the country through empowering the people by increasing their access to factors of production, especially credit. But, in Nigeria, because of some challenges in the country, the SME sector finds it very difficult to effectively play their role. Some of these constraints include among others; unhealthy competition, poor infrastructural facilities, outrageous taxes, poor managerial and marketing skills and inadequate finance. Also, poor economic conditions which also imply poor finance and inadequate infrastructures have been identified as the most crucial factors. And no doubt access to finance at relatively cheap cost is the most crucial problem hindering the development of the SME sector in Nigeria.

In the view of the Executive Governor of Lagos State, Governor Babatunde Fashola who was represented by the Commissioner of Finance Lagos State, Mr. Ayo Gbeleyi at the maiden edition of the First Bank of Nigeria Plc.'s SMEs Connect Conference in Lagos, described the problem of finance of the SMEs in the country to have essentially accounts for the pervasive level of unemployment we still record in the country. It is however believed that banks have the capacity to spur the growth of SMEs at relatively cheap costs and equally providing some other funding facilities, financial advisory services among others to the sector. It is against this background that the Central Bank of Nigeria (CBN) initiated a directive which mandates banks to set aside 10 per cent of their profit before tax for the funding of the sector.

It is somewhat surprising however while the SMEs in Nigeria still dwindle in terms of development despite the huge emphasis the sector is receiving among economists and development experts, with the sector still contributing a minuscule percentage to the country's GDP. It is therefore imperative at this time to examine the role of Banks in the growth of SMEs in Nigeria, and the salient question of this research is to know if the deposit money banks can act as catalyst to SMEs development in Nigeria? And if so, what can be done to make the sector more effective in its catalytic role to the SME sector? These are the questions this study would attempt to answer.

The objective of this research therefore is to examine the potential of deposit money banks in financing SMEs in Nigeria and to what extent they have contributed to the funding of the SME sector in Nigeria. In line with these objectives, the study is divided into five sections as follows: besides the introductory part, section two presents the review of theoretical and empirical literatures, section three examines the methodology, section four discusses the findings and section five concludes the study with policy recommendations.

## 2.0 LITERATURE REVIEW

This section discusses the concept of SME and SMEs financing, review of empirical literatures and the theoretical framework.

## 2.1 SME

The term SMEs is the acronym for Small and Medium Scale Enterprises. In this case, they are firms or businesses which are small and medium in sizes. According to Esuh and Adebayo (2012), they are firms or businesses arising as a result of entrepreneurial activities of individual.

SME sector is categorized into three namely; micro, small and medium enterprises or businesses. The micro SMEs are the smallest among the three categories. In the word of Darren et al (2009) “they are businesses that employ up to 9 employees in UK, while in Australia they employed fewer than 5 employees including non-employing businesses”. And according to US Census Bureau, micro business are categorized as SOHO meaning Small Office-Home Office. Therefore, micro businesses should be seen as the small type of form of SME that may employ fewer than 9 employees or on the other hand may not have employees at all. As regard the small business, they are businesses bigger than the micro-businesses in terms of size, number of employees, structure, capital investment and economic contributions. Thus, the Nigerian Industrial Policy defined small scale business as industries with total investment of between ₦100, 000 and ₦2 million, exclusive of land but including working capital. Lastly, the medium business as the name suggests are bigger than both micro and small businesses in terms of operations, manpower capacity or number of employees, structure, capital investment and size. Thus according to Joseph et al (2013), they are the businesses that employ not fewer than 15 employees under the Australian Fair Work Act (2009) to fewer than 500 employees under the US, while the European Commission (2003) defined medium businesses as enterprises which employ fewer than 250 persons and/or have an annual balance sheet total not exceeding EUR 43 million.

So, generally, the SMEs like most terms in social science has no universally acceptable standard of definition. Thus, Arowomole (2000) cited in Esuah and Adebayo (2012) affirmed that a single universally acceptable definition of SMEs has not been easy, as different countries have different criteria for defining SMEs. Adding that many countries have defined it in terms of manpower, management structure and capital investment limit. He further maintained that experts in this field have also contributed to the diversity in SMEs definitions.

One crucial thing to note about SMEs definition is that certain criteria have been used to define what it stands for most especially according to countries, sizes, number of employees, industry, asset value, etc. SMEs can therefore be conclusively defined in conformity with the definition of the Nigerian Industrial Policy that SMEs are industries with total investment of between ₦100, 000 and ₦2 million, exclusive of land but including working capital.

## 2.2 SMEs Financing in Nigeria

The role of finance in the real sector was first brought to the fore by the writings of Alexander Gerschenkron (1963) as cited by Onyeiwu (2012), which stressed that depending in the degree of backwardness, financial institutions are not only to provide capital but also other complimentary services such as entrepreneurial guidelines that would see businesses through their teething ages.. Schumpeter (1973) also stresses the role of credit in financing innovation to bring about development. In his theory, economic development arises as a result of innovation which is attributed to entrepreneur. But without credit the benefits may not be realized by the society and there lies the argument for continuous financial support for SMEs to realize its full potential.

Though the role of finance has been viewed as a critical element for the development of SMEs (Cook, 2001). But it is widely recognized that lack of sufficient finance and access to credit are often perceived to be the major constraint to the development of the sector in many parts of the world. Thus, according to a report of the OECD (2006), the SMEs are centerpiece of many advanced economies, but due to their limited size and their generally lower creditworthiness, their access to financial market instruments is more limited than for large enterprises, which benefit from more elaborate treasury operations, economies of scale, their financing operations and in particular from access to securitized lending and stock market. In another related study, Aris (2007) pointed out that SMEs generally faced difficulties in obtaining financing with lack of collateral, insufficient document to support loan application and lack of financial track record being the constraints faced by the SME sector in accessing financing.

However, evidence shows that in Nigeria, the level of external finance for the SMEs i.e. banks' loans and advances to the sector is very low (Onyeiwu, 2012). Drawing from a survey of SMEs conducted by World Bank between 2006 and 2007 and using four developing countries, namely Nigeria, South Africa, Brazil and India as example, it is evident that Nigerian SMEs are starved of Funds.

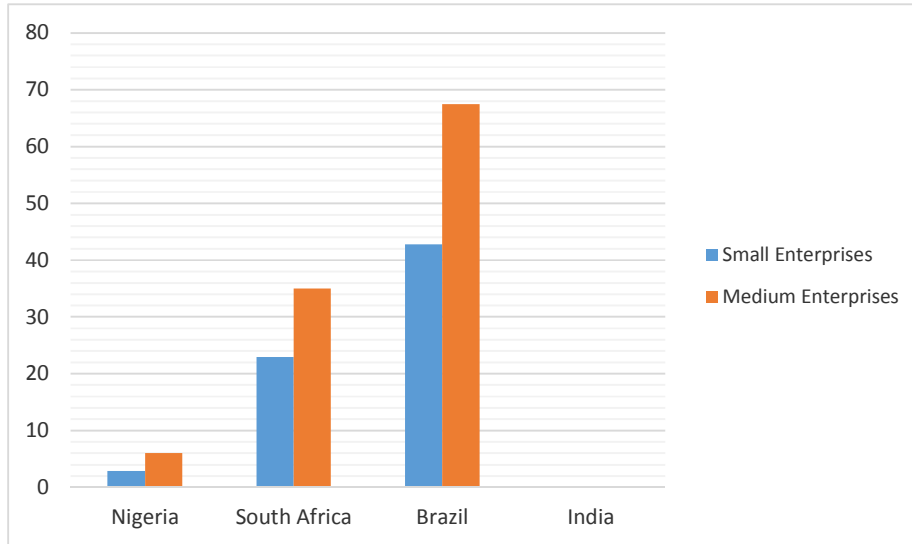
**Table 2.1: Percentage of Firms' Finances from Banks**

Countries	Loans to Small scale Enterprises	Loans to Medium scale Enterprises
Nigeria	2.87	6.01
South Africa	22.91	35.0
Brazil	42.79	67.5
India	0.00	0.00

Source: Authors' arrangement based on Onyeiwu (2012).

From the table 1 above, it is evident that only 2.87 per cent of Nigerian small scale enterprises have access to loans from banks, in South Africa 22.91 per cent of small enterprises have access to credit and 42.79 per cent of small scale enterprises have access to banks loans in Brazil. An examination of medium scale enterprises does not reflect a different picture. For instance, only 6.01 per cent of Nigerian medium scale enterprises have access to credit as opposed to 35 per cent and 67.5 per cent of the medium enterprises in South Africa and Brazil respectively. The figure 1 below also presents the graphical evidence of this.

**Figure 2.1: Percentage of Firms' Finances from Banks**



Source: Authors' computation using MS-Excel.

**Table 2.2: Percentage of Banks' Finances for SMEs Investment**

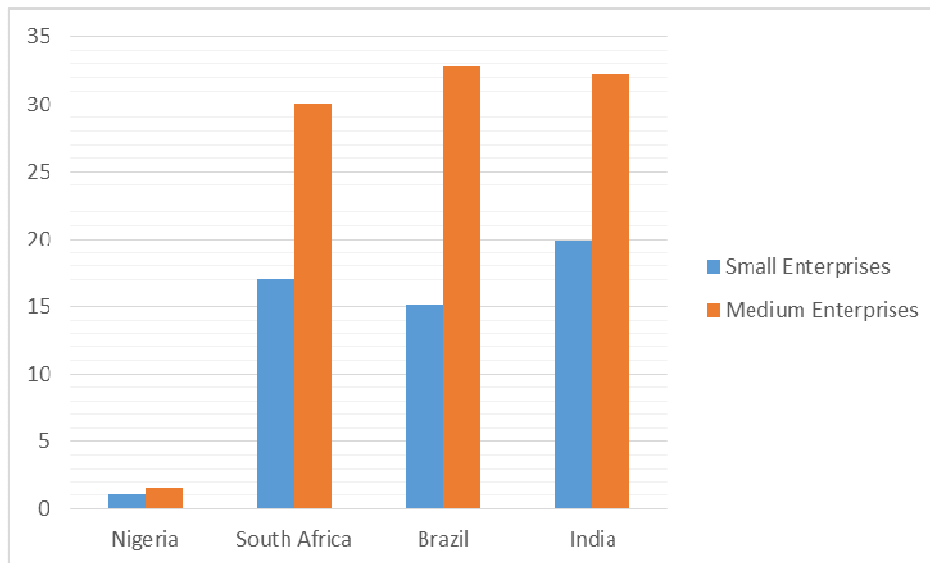
Countries	Loans to Small scale Enterprises for Investment	Loans to Medium scale Enterprises for Investment
Nigeria	1.07	1.57
South Africa	17.05	30.14
Brazil	15.09	32.73
India	19.9	32.18

Source: Authors' arrangement based on Onyeiwu (2012).

The table 2 above equally revealed that banks finance only 1.07 per cent of investment of small scale enterprises in Nigeria but bank finance of small scale enterprises are 17.05 per cent, 15.09 per cent and 19.9 per cent in South Africa, Brazil and India respectively. The situation is not different for medium scale enterprises because while Bank finance of investment is 30.14 per cent, 32.73 per cent, and 32.18 per cent in South Africa, Brazil and India respectively, it was only 1.57 per cent in Nigeria.

Again, figure 2 presents the graphical illustration of this as thus:

**Figure 1.2: Percentage of Banks' Finances for SMEs Investment**



Source: Authors' computation using MS-Excel.

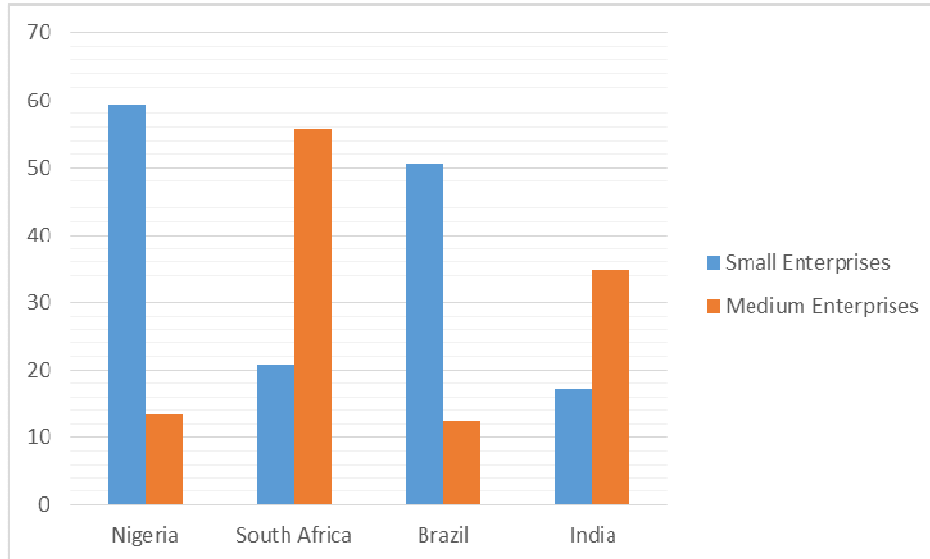
**Table 2.3: Percentage of Enterprises which Identify Access to Finance as Major Constraints**

Countries	Small Scale Enterprises	Medium Scale Enterprises
Nigeria	59.34	13.51
South Africa	20.9	55.69
Brazil	50.62	12.48
India	17.09	34.85

Source: Authors' arrangement based on Onyeiwu (2012).

Furthermore, a close examination of the percentage of small scale enterprises that identify finance as a major constraints, the percentage of small scale enterprises that identify finance as a major constraint are 20.9 per cent, 50.02 per cent and 17.09 per cent in South Africa, Brazil, and India respectively, while about 59.34 per cent of small scale enterprises in Nigeria indicated that access to finance is the their major constraint. And for medium scale enterprises, the percentage of enterprises that identify finance as major challenge are 34.85 per cent, 12.48 per cent, 55.69 per cent and 13.52 per cent in India, South Africa, Brazil and Nigeria. The graphical illustration of this is also presented in the figure below:

**Figure 2.2: Percentage of Enterprises which Identify Access to Finance as Major Constraints**



Source: Authors' computation using MS-Excel.

The implication of the statistics above is that there is obvious financial gap that needs to be filled in Nigeria. It also reflects more robust and better sophistication of the financial structures in South Africa, Brazil and India and a highly risk averse and perhaps non dynamic orientation of Nigerian Banks, Ojo (2010) in Onyeiwu (2012).

The recommendation here is that, a step has to be taken by regulatory authorities to introduce financial reform that would ensure that the access SMEs have to finance in the country is inline with those of transition economies, such as South Africa, Brazil and India if the Government is sincere with its development targets expressed in its vision 20:2020.

### 2.3 Empirical Review

A lot has been reviewed in terms of financing activities of various deposit money banks. Some opinions and investigations focused on the factor responsible for banks willingness to extend much credit to some key sectors of the economy and the impact of such credits to the aggregate economy, while some discussed the effect of such extension of credits to some specific sectors of the economy such as Agricultural, SME and other sectors. Hence, outcomes of some of these studies are succinctly discussed and analyzed in this section.

According to Onyeiwu (2012) in examining the effect of SMEs financing on the economic growth of Nigeria. In doing this, the Ordinary Least Squares Method (OLS), Error Correction and Parsimonious models were used to analyze the quarterly data between 1994 and 2008. The empirical result showed that loans to SMEs and other variables except money supply and deficit financing exert a positive impact on GDP growth. The study thus recommend that government should find a way to encourage financial institution to lend to SMEs to guarantee their development.

Also, Alalade et al (2013) examined the relationship and causality between microfinance bank operations and entrepreneurship development in Ogun state, Nigeria. The study adopted the survey research design and questionnaires to collect the data. The study revealed that there is no significant impact of microfinance bank operations on entrepreneurial development in the State. They therefore recommended



that government should find an avenue for creation of awareness on how entrepreneurs can benefit from bank loans.

Thorsten (2007) equally researched on financing constraints of SMEs in developing countries. Using the concept of the access possibilities frontier to explain how difficulties in managing risk and transaction costs involved in SME lending. The empirical research shows that SMEs are more constrained by financing and other institutional obstacles than large enterprises, exacerbated by the weaknesses in the financial systems of many developed countries.

In the like manner, Ogujiuba et al (2004) investigated the credit availability to SMEs in Nigeria. The study adopted a conceptual analytical framework that employs theoretical and statistical comparative cross-sectional data to analyze the SMIEIS Programme of Nigeria vis-à-vis capital base of banks in ascertaining whether it offers an effective means of solving problem of funding SME in Nigeria and its attendant implication for financial stability in the system. The study shows that capital matters for the response of bank lending to economic shocks and highlights the need for a sound, stable and efficient financial sector to assist SMEs.

Imoughele and Ismaila (2013) also investigated the impact of commercial bank credit accessibility and sectoral output performance in Nigerian economy for the period which spanned between 1986 and 2011. An augmented growth model was estimated via the ordinary least square (OLS) techniques. The result found that the various commercial bank credit supply has a long-run relationship with sectoral output performance in Nigeria.

Avinash and Mitchell-Ryan (2009) assessed the impact of the sectoral Distribution of commercial bank credit on Economic growth and development in Trinidad and Tobago. They noted that in Trinidad and Tobago, commercial bank credit plays an important role in the way in which businesses and individuals finance economic transactions. They asserted that the credit channel of the monetary transmission mechanisms, which states that credit influences economic growth through its impact on capital investment. They employ a vector error correction model to firstly assess the relationship between credit and investment, and secondly to determine the casual directionality of the relationship (if any). The model found that overall, credit and growth tends to demonstrate a demand following' relationship. However, further analysis revealed a 'supply leading' relationship between credit and growth within key sectors of the non-oil economy.

And also, Afolabi (2013) investigated the growth effect of SMEs financing in Nigeria, the study employed ordinary least square (OLS) method to estimate the multiple regression model. The result revealed that SMEs output proxy by wholesale and retail trade output as a component of GDP, commercial banks credit to SMEs and exchange rate of naira vis-à-vis U.S dollar exert positive influence on economic development proxy real GDP while lending rate is found to exert negative effects on economic growth. In terms of partial significance and using t-statistic as a test of evaluation, SMEs output and commercial banks' credit to SMEs were found to be significant factors enhancing economic growth in Nigeria at 5% critical level. Therefore, the study proffered that the central authority should create an enabling environment for SME development.

Duru and Lawal (2012), accessed the impact of financial sector reforms on the growth of small scale enterprises in Nigeria. The paper used modelling method to determine output performance of SMEs as a function of several inputs such as firm's characteristics, firm's ownership and credit facilities through the financial the financial sector. The results indicate that all these variables have positive and significant impact on the growth of SMEs in Nigeria. Thus, the study concluded that financial sector reforms have positive impact on the growth of SMEs in Nigeria, and recommended that the government should create an enabling environment by providing infrastructural facilities and security to ease the cost of doing business in the economy.



Again, Ojo (2009) investigated the impact of microfinance on entrepreneurial development of SMEs in Nigeria. He used questionnaire as instrument of primary data collection, while tables and simple percentages were used in presenting the data. The study revealed that there is a significant effect of microfinance institutions activities in predicting entrepreneurial productivity.

Similarly, Nwosa and Oseni (2013) also empirically examined the impact of bank loan to SMEs on manufacturing output in Nigeria for the period 1992 to 2010. The study employed an error correction modelling technique and observed that banks loan to the SME sector had significant impact on manufacturing output both in the long-run and short-run. Based on their findings, they suggest the need for greater deliberation and conscious effort by the government in ensuring that loans are given to ultimate users- the SMEs.

Furthermore, Samson and Abass (2012) examined the role of banks deposit money on the growth of Nigerian economy. The study was based on time series which covered 1974 to 2010. The co-integration and error correction model and structural analysis were used, ADF and PP were also adopted in testing for the unit root. The result revealed that there exit a long-run relationship between economic growth and commercial bank credit measures. They therefore advocated for policies that tend to increase the gross domestic production through the financial sector such as increase in banks deposit liability, low interest rate and high liquidity ratio.

Oyefuga et al (2010) evaluated the impact of Small and Medium Enterprises Equity Investment Scheme (SMEEIS) on the growth of Nigerian SMEs. Questionnaires and interviews were used to sample firms and banks. From the study, uncoordinated business plans and poorly packaged projects were found to be the most significant reasons why SMEs could not access funds from the scheme.

Lastly, Abiola et al (2011) investigated the contributions of microfinance to the development of micro, small and medium enterprises in Lagos and Ogun states, Nigeria. The research was design to combined primary and secondary sources of data. The data obtained were analyzed using one sample t-test, Pearson correlation coefficient analysis and multiple regression technique. The result obtained revealed that there is a low positive correlation between micro loan received by entrepreneurs and business expansion capacity of MSMEs in Nigeria. It was also revealed that the non-financial services rendered by microfinance banks enhance business performance of MSMEs, while the financial services particularly the asset loan size; asset loan duration and asset loan repayment method does not have the capacity to enhance MSMEs business growth. The study therefore recommended that Microfinance Bank (MFBs) should increase the duration of asset loans given to client, or spread the repayment over a longer period of time, or increase the moratorium. This they opined will enable the clients to have greater use of the loan over a longer period for the acquisition of capital assets and technology.

## **2.4 Theoretical Framework**

There are different transmission channels through which monetary policy affects economic activities and these channels of transmissions have been broadly examined under the monetarist schools of thought. The monetarist postulates that change in the money supply leads directly to a change in the real magnitude of money. Describing this transmission mechanism, (Friedman and Schwartz. 1963) as reported in Onyeiwu (2012) say that an expansive open market operations by the Central Bank, increases stock of money, which also leads to an increase in Commercial Bank reserves and ability to create credit and hence increase money supply through the multiplier effect. Credit is an important aspect of financial intermediation that provides funds to those economic entities that can put them into the most productive use. Theoretical studies have established the relationship that exists between financial intermediation and economic growth which is hypothesized under the finance led growth theory. For instance, Schumpeter

(1934), Goldsmith (1969), McKinnon (1973) and Shaw (1973) cited in Imoughele and Ismaila (2013), in their studies, strongly emphasized the role of financial intermediation in economic growth.

In the same vein, Greenwood and Jovanovich (1990) observed that financial development can lead to rapid growth. In a related study, Bencivenga and Smith (1991) explained that development of banks and efficient financial intermediation contributes to economic growth by channeling savings to high productive activities and reduction of liquidity risks (Imoughele and Ismaila, 2013). They therefore concluded that financial intermediation leads to growth. This means that a financial institution can effect economic growth by efficiently carrying out its functions, among which is the provision of credit. It is on this assertion, that this study try to examine the extent to which banks intermediation or credits to SME sector of the economy has influenced the sectors performance.

### 3.0 METHODOLOGY

The study used secondary data derived from the publications of Central Bank of Nigeria, specifically the CBN statistical bulletin, and some other sources like; e-Books, online Journals, academic papers and relevant textbooks . The data is for 20 years covering 1992 and 2012 because data on SMEs financing in CBN annual report started in 1992. Various statistical techniques are adopted to test the properties of the variables and the stability of the model structure and functional form. Unit root, and Johansen co-integration tests are used to investigate the stationary properties of the variable, while the statistical tool used to analyze the influence of banks credit on SMEs development in Nigeria is multiple regression technique which is processed electronically via Eviews 7.

#### 3.1 Model Specification

The econometric model employed in this study to investigate the effect of deposit money banks on SMEs development in Nigeria is formulated following the previous empirical study of Afolabi (2013), who investigated the growth effect of SMEs financing in Nigeria between the periods 1980 to 2010. The study employed Real GDP as the dependent variable as against the SMEs output proxy by wholesale and retail output as a component of GDP, Commercial banks' credit to SMEs, Exchange rate and Lending rate as the independent variables.

However, this study model is specify as:

$$SMEQ = \alpha_0 + \alpha_1 CSME + \alpha_2 TSCB + \alpha_3 EXCH + INTR + \mu_i$$

And by log linearization the equation becomes:

$$\ln SMEQ = \alpha_0 + \alpha_1 \ln CSME + \alpha_2 \ln TSCB + \alpha_3 \ln EXCH + \alpha_4 \ln INTR + \mu_i$$

Where:

Ln = Natural logarithm

SMEQ = SMEs output proxy by Wholesale and Retail trade output as a component of GDP

CSME = Commercial Banks' Credit to Small scale enterprises

STCB = Savings and Time deposit with Commercial banks

EXCH = Exchange rate of naira vis-à-vis U.S dollar

INTR = Interest rate (lending rate)

$\alpha_1 - \alpha_4$  = Slopes or Coefficients of the explanatory variables

$\alpha_0$  = Intercept of the model

$\mu_i$  = Random variable or Error term

On the apriori ground, it is expected that  $\alpha_1$ ,  $\alpha_2$ , and  $\alpha_3$  should be greater than zero i.e. positive, while  $\alpha_4$  is expected to be less than zero i.e. negative.

Thus, the model is a modification and an enlarged form of Afolabi (2013) model.

#### 4.0 RESULTS PRESENTATION AND DISCUSSION

This section highlights the econometric framework used for this study. It highlights the co integration and the regression analysis used to study the effect of banks' credit on SMEs development in Nigeria. The analysis of unit-root processes and co integrated systems has played a significant role in econometrics and data analysis in the last decade, with applications to diverse fields such as macroeconomics, finance, economic history, international economics, etc. The reasons for such a rapid expansion of the subject are its strong intuitive appeal and its highly involved technical complexity (Onyeiwu, 2011).

##### 4.1 Result Presentation and Discussion

The result of the pre-estimation tests and regression analysis are presented and discussed as thus:

**Table 4.1: Augmented Dickey-Fuller (ADF) Unit Root Test @First Difference**

Variable	Lag Length	ADF Test Statistic	ADF Critical Value at 0.05 level	Probability	Order of Integration
LnSMEQ	1	-2.643487	-3.040391	1.1030	1(1)
LnCSME	1	-5.383976	-3.040391	0.0005	1(1)
LnSTCB	1	-3.250338	-3.040391	0.0335	1(1)
LnEXCH	1	-4.177830	3.857386	0-0052	1(1)
INTR	1	-4.861636	-3.052169	0.0015	1(1)

Source: Authors' Computation (2014) using E-Views 7.

In the table 1 above, the variables were tested at first difference for the presence of a unit root using 5 per cent level of significance. Virtually all the variables except small scale enterprises output (LnSMEQ) indicate absence of a unit root problem. However, due to the non-stationary state of LnSMEQ at first differencing, we therefore proceed to undertake the second differencing to determine the whether there is a linear co-integration of series at order 2 as presented in table 2 below.

**Table 4.2: Augmented Dickey-Fuller (ADF) Unit Root Test @Second Difference**

Variable	Lag Length	ADF Test Statistic	ADF Critical Value at 0.05 level	Probability	Order of Integration
LnSMEQ	1	-6.101692	-3.040391	0.0001	1(2)
LnCSME	1	-10.78694	-3.040391	0.0000	1(2)
LnSTCB	1	-6.014995	-3.040391	0.0002	1(2)
LnEXCH	1	-6.700702	-3.857386	0.0000	1(2)
INTR	1	-5.802060	-3.065585	0.0003	1(2)

Source: Authors' Computation (2014) using E-Views 7.

The empirical result from table 2 above reveals that all the variables achieved a stationary state after the second differencing at 5 per cent level of significance. We then reject the unit root null hypothesis of non-stationary and conclude that the variables were integrated at order two series. We therefore, examine their co-integrating relationship using Johansen co-integration procedure as follows:

**Table 4.3: Johansen Co-integrating Test Result between the Variables: LnSMEQ LnCSME LnSTCB LnEXCH INTR**

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	5 Per cent Critical Value	1 Per cent Critical Value
None	0.973576	137.1910	68.52	76.07
At most 1	0.897068	71.78846	47.21	54.46
At most 2	0.577414	30.86204	29.68	35.65
At most 3	0.458571	15.35754	15.41	20.04
At most 4	0.213100	4.313767	3.76	6.65

Source: Authors' Computation (2014) using E-Views 7.

The result in table 3 suggest 4 co-integrating equation in the variables as evidenced by the trace statistic of 137.1910, 71.78846, 30.86204 and 4.313767 which are greater than their critical values at 5 per cent level. This thus necessitates the rejection of the null hypothesis that banks' credit have no significant effect on SMEs development in Nigeria.

**Table 4.4: Regression Result**

Variable	Coefficient	Stand. Error	T-stat	Prob.	F-stat	R <sup>2</sup>	Adjusted R <sup>2</sup>	D.W stat
C	-0.0848	1.5274	-0.0559	0.9562	239.0935	0.9846	0.9804	2.0617
LnCSME	0.3468	0.0967	3.5858	0.0027				
LnSTCB	0.8957	0.0793	11.2887	0.0000				
LnEXCH	-0.2499	0.1351	-1.8479	0.0844				
INTR	-0.0347	0.0146	-2.3831	0.0308				

Source: Authors' Computation (2014) using E-Views 7.

The equation of the model specification is presented as follows:

$$SMEQ = -0.0848 + 0.3468CSME + 0.8957STCB - 0.2499EXCH - 0.0347INTR$$

The result in the table 4 shows that the predictor variables i.e. commercial banks' credit to SMEs, Savings and time deposit with commercial banks', Exchange rate and the Lending interest rate were significant joint predictors of SMEs output; as evidenced by the F-statistic of 239.09, which confirms that the model is significantly fitted. Also, the predictor variables jointly explains over 98 per cent systematic change in SMEs output, supported by the Adjusted R-squared explaining over 98 per cent change in the growth of SMEs output, while the remaining 2 per cent could be due to extraneous variables. Furthermore, the constant parameter in the long-run is negative. This implies that if all the explanatory variables are held constant, the SMEs output will reduce by 0.085 units. Also, CSME and STCB were positive significant predictors of SMEQ. This implies that a unit increase in CSME and STCB will lead to an increase in the growth of SMEs output by 0.35 units and 0.90 units respectively. However, EXCH and INTR exhibit a negative relationship with SMEQ, specifically; a unit increase in EXCH and INTR will retard the growth

of SMEs output in the long-run, but only INTR was found to be doing so significantly. And lastly, the Durbin Watson statistic (2.062) indicates the absence of positive serial autocorrelation among the successive value of the variables.

## 4.2 Policy Implication

The study has been able to examine the impact of banks' credit on SMEs development in Nigeria. The unit root test indicate that all the variables are stationary at the second difference and the co-integration result revealed 4 co-integrating relation in the variables. And, the regression result revealed a positive relation between banks' credit to SMEs and SMEs development, implying that the increase in SMEs financing by banks can increase enterprise investment and guarantee higher productivity of the sector, and this is synonymous with the apriori expectation. The savings and time deposit of commercial banks also indicate a significant positive relation with SMEs growth. This implies that SMEs respond favourably to increase in aggregate savings in the economy, and this complies with the apriori expectation as well. Also, a change in exchange rate of naira vis-à-vis US dollar was found to exert negative but insignificant effect on SMEs growth in Nigeria during the reviewed period, which means exchange rate need to be well regulated and stabilized because of its adverse effect on reducing SMEs development in the country. Lastly, lending rate i.e. interest rate as a measure of cost financing was found to deteriorate SMEs growth significantly, and this is in line with the economic expectation. The implication therein is that to ensure the development of SMEs in Nigeria, interest rate need to be kept at its minimum.

## 5.0 CONCLUSION AND RECOMMENDATIONS

### 5.1 Conclusion

This study examines banks' credit to SMEs development in Nigeria and in the course of the study, the concept of SMEs and its financing as it relates to Nigeria was reviewed. And based on the regression result, it could be concluded that commercial banks' credit to SMEs, savings and time deposit of commercial banks, exchange rate and interest rate are major long-run determinants of SMEs development in Nigeria, specifically, banks' credit to SMEs and the savings and time deposit of commercial banks exhibit direct relationship with SMEs growth. A similar finding is reported by Afolabi (2013) and Onyeiwu (2013) that banks' credit had been instrumental in the financing of SMEs development in the country. While the coefficients of exchange rate and interest rate was negative, implying that the two variables are inversely related to SMEs growth, that is, exchange rate and interest rate retard SMEs growth in the country. These negative effects also complement the findings of Afolabi (2013), who found an indirect relationship between interest rate and SMEs growth in Nigeria.

Therefore, based on the F-statistic result, this study rejects the null hypothesis and conclude that there is significant relationship between banks' credit and SMEs development in Nigeria.

### 5.2 Policy Recommendations

Based on the findings in this study and to induce credit accessibility and SMEs output performance, the following recommendations are advocated:

- i. Monetary authority should mandate banks to increase their credit accessibility and allocation for SMEs in the country, and banks should in turn device appropriate surveillance measures against diversifying such credits on unproductive activities.
- ii. More so, they should intensify efforts in decreasing credit allocation requirements in terms of collateral and interest in order to rekindle SME investors' interest in securing loans from banks.

- iii. They should equally ensure stability and avoid fluctuations in exchange rate which could have adverse effect on SMEs development in Nigeria.
- iv. Adequate savings should be mobilized from the public by emphasizing more on savings, so as to ensure the flow of funds from surplus unit to deficit unit of the economy. Thus, adequate fund could be harnessed to the SME sector.
- v. Lastly, Government has to find way to encourage banks to lend to SMEs by providing guarantees, interest rate subsidies and other incentives

## REFERENCE(S)

- [1] Abiola, B., Iyoha, F., and Joseph, T. (2011): "Microfinance and Micro, Small and Medium Enterprises Development in Nigeria" Unpublished Article, Covenant University, Ota, Ogun State, Nigeria.
- [2] Afolabi, M. O. (2013): "Growth effect of Small and Medium Enterprises (SMEs) Financing in Nigeria" *Journal of African Macroeconomic Review*. Vol. 3, No. 1. Pp. 193-205.
- [3] Alalade, Y. S., Amusa, B. O. and Adekunle, O. A. (2013): "Microfinance Bank as a Catalyst for Entrepreneurship Development in Nigeria: Evidence from Ogun State?" *International Journal of Business and Social Sciences*. Vol. 4, No. 12. Pp. 286-303.
- [4] Aris, N. M. (2007): "SMEs Building Blocks for Economic Growth" *Journal of Department of Statistics*, Department of Statistics, Malaysia, Vol. 1.
- [5] Cook, P. (2001): "Finance and Small and Medium-sized Enterprise in Developing Countries" *Journal of Developmental Entrepreneurship*, Vol. 6, No. 1, Pp. 17-40.
- [6] Duru, M. and Lawal, M. K. (2012): "Financial sector Reforms and the Growth of Small and Medium Scale Enterprises (SMEs) in Nigeria" *Universal Journal of Management and Social Sciences*. Vol. 2, No. 2 Pp. 86-97.
- [7] Esuh, O. L. and Adebayo, I. O. (2013): "Is Small and Medium Enterprises (SMEs) an Entrepreneurship?" *International Journal of Academic Research in Business and Social Sciences*. Vol. 2, No. 1. 487-496.
- [8] Fashola, B. R. (2013): "Structure of SMEs in Nigeria" A paper delivered by Mr. Ayo Gbeleyi while representing the executive governor of Lagos State, Governor Babatunde Raji Fashola at the First Bank of Nigeria Limited SME Connect Conference titled: "SMEs at the Heart of National Development : Creativity, Capacity and Capital. Lagos.
- [9] Imoughele, L. E and Ismaila, M (2013): "Commercial Bank Credit Accessibility and sectoral output Performance in a Deregulated Financial market Economy: Empirical Evidence from Nigeria. *Journal of Finance and Bank Management*. Vol. 1, No. 2, Pp. 36-59.
- [10] Nwosa, P. I. and Oseni, I. O. (2012): "The impact of Banks Loan to SMEs on Manufacturing Output in Nigeria" *Journal of Social and Development Sciences*. Vol. 4, No. 5. Pp. 212-217.
- [11] OECD (2006): *The SME Financing Gap: Theory and Evidence* Organization for Economic Co-operation and Development Report. Vol. 1.
- [12] Ogujiuba, K. K., Ohuche, F. K. and Adenuga, A. O (2004): "Credit availability to Small and Medium Scale Enterprises in Nigeria: Importance of New capital Base for Banks- Background and Issues. *AIAE Working paper*.
- [13] Ojo, O (2009): *Impact of Microfinance on Entrepreneurial Development: The case of Nigeria*. A paper presented at the International conference on Economics and Administration, Faculty of Administration and Business, University of Bucharest, Romania. 14th -15th November, ICEA-FAA Bucharest.



- [14] Onuorah, A. C (2013): “Bank credits: An aid to Economic Growth in Nigeria. *International Institute of Scientific and Technological Education*. Vol. 3, No. 3. Pp. 41-50.
- [15] Onyeiwu, C. (2012): “Small and Medium Enterprises Finance and Economic Development of Nigeria” An unpublished Article. University of Lagos. Lagos State, Nigeria.
- [16] Oyefuga, I. O., Siyanbola, W. O., Afolabi, O. D, Dada, A. D. and Egbetokun, A. A. (2010): “SMEs funding: An Assessment of An intervention Scheme in Nigeria” *World Bank Review of Entrepreneurship, Management and Sustainable Development*. Vol. 2, No. 5.
- [17] Samson, O. and Abass, A. S. (2012): “Does Deposit Money Banks impact Economic growth? Evidence from Nigeria” *African Journal of Business Management*. Vol. 7, No. 3, Pp. 196-205.
- [18] Schumpeter, J. (1973): *The Theory of Economic Development* Cambridge Mass: Harvard University Press.
- [19] Thorsten, B. (2007): “Financing constraints of SMEs in Developing countries: Evidence, Determinants and Solutions. *Working paper*. No. 4.
- [20] Tulus, T. (2008): “SMEs Development in Indonesia: Do Economic Growth and Government support matter” *IJAPS*. Vol. 4, No. 2. Pp. 111-133.
- [21] United Nation Industrial Development Organization: UNIDO (2002): “Corporate Social Responsibility: Implications for Small and Medium Enterprises in Developing Countries”. Vienna. Retrieved from the internet on 1st June 2014 at [www.unido.org/fileadmin/user\\_media/](http://www.unido.org/fileadmin/user_media/)

#### Appendix A: Data Used for the Regression

Year	SMEQ	CSME	STCB	EXCH	INTR
1992	62296.25	20,400.0	43,438.80	17.3	29.8
1993	100848.89	15,462.9	60,895.90	22.05	18.32
1994	158394.50	20,552.5	76,127.80	21.89	21
1995	273912.72	32,374.5	93,327.80	21.89	20.18
1996	357053.01	42,302.1	115,352.30	21.89	19.74
1997	392343.38	40,844.3	154,055.70	21.89	13.54
1998	444484.92	42,260.7	161,931.90	21.89	18.29
1999	485667.00	46,824.0	241,604.70	92.69	21.32
2000	527485.40	44,542.3	343,174.10	102.11	17.98
2001	642697.21	52,428.4	451,963.10	111.94	18.29
2002	772436.94	82,368.4	556,011.70	120.97	24.85
2003	922149.87	90,176.5	655,739.70	129.36	20.71
2004	1484422.36	54,981.2	797,517.20	133.5	19.18
2005	1868251.30	50,672.6	1,316,957.40	132.15	17.95
2006	2741794.53	25,713.7	1,739,636.90	128.65	17.26
2007	3044773.87	41,100.4	2,693,554.30	125.83	16.94
2008	3503181.70	13,512.2	4,118,172.80	118.57	15.14
2009	4082351.76	16,366.5	5,763,511.20	148.9	18.99
2010	4648696.98	12,550.3	5,954,260.50	150.3	17.59
2011	5388008.55	15,611.7	6,531,913.01	153.86	16.02

Source: CBN Statistical bulletin 2011.