# Impact of Financial Intermediation on the Growth of Small Scale Businesses in Nigeria

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Abstract: This study examined the impact of financial intermediation on the growth of small scale businesses in Nigeria. Secondary data was collected from Central Bank of Nigeria Statistical Bulletin. The specific objectives of the study were to; ascertain the impact of deposit money banks credit on small scale businesses in Nigeria, to determine the impact of savings on small scale businesses in Nigeria, to ascertain the impact of banks total asset on small scale businesses in Nigeria. The research design was ex-post facto research design, and the study used multiple regression analysis statistical technique. The results revealed that deposit money banks credit to small scale enterprise do not have significant impact on small scale businesses in Nigeria, savings does not have significant impact on small scale businesses in Nigeria, bank total asset have significant impact on small scale businesses in Nigeria. Thus, we conclude that financial intermediation influenced small scale businesses positively and significantly in Nigeria. Recommendations were that banks should be more efficient in mobilizing and allocating funds to entrepreneurs in the real sector. The regulatory authorities should continuously take measures to liberalize the financial system to avoid any form of shock on the system.

Key words: Financial Intermediation, Small Scale Businesses

## I. INTRODUCTION

C mall scale business plays very important roles in the development of nations, especially in an emerging economy such as Nigeria. They play a significant role in national economy by providing various goods and services, creating job opportunities, developing regional economies and communities, helping the competition in the market and offering innovation. Main areas of their presence are manufacturing industry, distribution industry and services. A business which functions on a small scale level involves less capital investment, less number of labor and fewer machines to operate is known as a small scale business. Small scale Industries or small businesses are the type of industries that produces goods and services on a small scale. These industries play an important role in the economic development of a country. The owner invests once on machinery, industries, and plants, or take is a lease or hire purchase. Few examples of small-scale businesses are paper, toothpick, pen, bakeries, candles, local chocolate, etc., industries and are mostly settled in an urban area as a separate unit. The small-scale industry is seen as a key to Nigeria's growth and alleviation of poverty and unemployment in the country. Therefore, promotion of such enterprises in developing economies like Nigeria is of paramount importance since it brings about a great distribution of income and wealth, development of indigenous technology, speed up the rate of social economic development, economic self-dependence, entrepreneurial development, employment and a host of other positive economic uplifting factors (Aremu 2004). A small scale enterprise is a business that is not large, in terms of its size, scope of operation, financial involvement and the workforce involved. Most small scale enterprises are owned by one entrepreneur. Sometimes a small scale enterprise is said to be a firm that is independently owned and operated and which is not dominant in its field of operation. In general, we should recognize that a small scale business must have few employees, limited capital investment and small scale operation (Nicholas, 1997). As far as the development of the rural and urban areas in Nigeria is concerned, the role of small scale enterprises cannot be under-estimated. The present administration realizes the importance of these small scale ventures hence the various policies being put in place to encourage their growth. The small scale businesses have the potentiality to reduce the rate of unemployment in Nigeria and thus to contribute to the Gross Domestic Product (GDP) and economic growth of the nation (Oshagbemi, 1983). The industrialized nations which have attained technological advancement today owe their present position to the establishment of small scale industries in the past. The small scale businesses served as pivot for technological take off and self-reliance. In the commercial world, there are numerous kinds of business undertakings. This varies from private enterprises to public corporations. A small scale enterprise is defined as a business which is independent, small in size and often localized. Most small scale businesses are operated by private individuals or group of individuals (Onuoha, 1944).

However, several studies have been carried out to identify the drivers of small scale businesses growth in Nigeria and abroad (Forgha, Sama, &Aquilas, 2016). The outcomes from these studies (both theoretical and empirical) have severally identified financial intermediation as one of the catalyst for small scale businesses growth. Financial intermediation is the process whereby financial service providers like banks pull funds from the public as deposits and transform them into loanable funds (Agbada&Osuji, 2013). This implies that the intermediation process help turns deposit liabilities from surplus economic units to bank's major interest earner, loans and advances to the deficit units of the small scale businesses.

Deposit money banks are profit seeking institutions that mobilizes savings from various surplus spending units in the economy and provide financial services for the purpose of making money for their stockholders. Their capital usually comes from private investors, corporate entities and other highly regulated institutions that maintain strict financial discipline in the attainment of their goals. The mobilized funds are usually channeled to the deficit sectors of the economy at a fee after ensuring that adequate polices are put in place to analyze the proposal before the facility can be availed to the client. One of the areas into which funds are channeled is the small and medium scale enterprises in Nigeria. The analysis of the contribution of deposit money banks to small scale enterprises have stem debate and growing interest among researchers, policy makers and entrepreneurs, recognizing the immense contribution of the subsector to economic growth. The relative importance of small-scale enterprise in advanced and developing countries has led and would continue to lead reconsideration of the role of smallscale enterprises in the economy of nations. The development of many countries is often measured by such indices as the level of industrialization, modernization, urbanization, gainful and meaningful employment for all those who are able and willing to work, income per capital, equitable distribution of income and the welfare and quality of life enjoyed by the citizenry. The small-scale industry is seen as a key to Nigeria's growth and alleviation of poverty and unemployment in the country. Therefore, promotion of such enterprises in developing economies like Nigeria is of paramount importance since it brings about a great distribution of income and wealth, development of indigenous technology, speed up the rate of social economic development, economic self-dependence, entrepreneurial development, employment and a host of other positive economic uplifting factors (Aremu 2004). Specifically, finance literature has shown that the availability of financial factors goes a long way in determining the sustainable development of small scale businesses. That is, the availability and access to funds for investment is an integral element in stimulating small scale growth in any economy (Sanusi, 2002). Consequently, the will of progress of every economy is hinged on the financial system. The financial system help enhance the production capacity of a nation outwards. Thus, efficient mobilization of funds and access to credit are sine qua non to kick-start the small scale businesses that will lead to economic growth of a nation.

In Nigeria, it is argued that small and medium scale enterprise (SMEs) often experience difficulty in accessing banking credit due to the assumed risk exhibited by the weak or new ones, absence of collateral to support credit, their remote area of operation and relatively small size of loan required. Consequently, business transaction costs are relatively high and the addition of the cost of the loan makes it exorbitantly too high for them to allow a reasonable return on investment.

The State of Nigeria economy today with regards to unemployment has made it necessary for entrepreneurship to be embraced and encouraged by the populace.

The major problem of the people is finance i.e. lack of capital. From what we see in our Nigeria environment, a lot of small businesses continue to remain small even where opportunities for expansion exist.

Despite the availability of commercial and other banks that are willing to come to the aid of entrepreneurs who engage in small scale businesses, there seem to be a lot of such entrepreneurs that do not know how to approach the banks and utilize available opportunities. Thus, this study seeks to investigate the impact of financial intermediation on the growth of small scale businesses in Nigeria.

Nigerian economic scene is the great diversity and multiplicity of small-scale businesses. In every village or town there exist numerous businesses establishments. According to Osuala, 1993, small scale indigenous businesses were in existence before modern marketing developed in Nigeria. These small-scale businesses were however not as predominant or demanding in their operational activities as is evident today. The state of Nigeria's economy today with regards to unemployment has made it necessary for entrepreneurship to be embraced by the populace. The major problem of the Nigerian people is finance i.e., lack of capital. From what we see in our Nigerian environment, a lot of small businesses continue to remain small even where opportunities for expansion exist.

Despite the availability of commercial and other banks that are willing to come to the aid of entrepreneurs who engage in small scale businesses, there seem to be a lot of such entrepreneurs. Based on these, this study is designed to reassess the impact of financial intermediation in influencing and sustaining small scale businesses growth in Nigeria. The aim of this study is to ascertain the impact of financial intermediation on the growth of small scale businesses in Nigeria

## 1.1 Research Hypotheses

The following null hypotheses will guide this study

Ho<sub>1</sub> deposit money banks credit do not have any significant impact on small scale businesses in Nigeria

 $Ho_2$  savings do not have any significant impact on small scale businesses in Nigeria

 $Ho_3$  bank total asset do not have any significant impact on small scale businesses in Nigeria

## II. REVIEW OF RELATED LITERATURE

This section reviews extant literature on the impact of financial intermediation on the growth of small scale businesses in Nigeria. It discusses conceptual framework, theoretical framework, empirical review and gaps in literature.

#### 2.1 Conceptual Framework

This section deals with the concept of the major components of the study with the view that readers should understand, the concepts are: Financial intermediation and Small scale businesses.

## Financial Intermediation

Financial intermediation is defined as the process of accumulating deposits (savings) into deposit money banks for sale to the public as loans (Siklos, 2001; Milicher & Norton, 2011). It can also be referred to as the process of mobilizing deposits from surplus economic agents to deficit units as credit (Gordon &Winton, 2002). That is, they mobilize funds from savers or households and transform them into loanable funds and loan them out to government agencies, businesses and households as credit. This intermediation function help bridges the gap between surplus owners of funds and the deficit units (mostly government agencies, businesses and households) that are in need of funds for their investment or other needs. Generally, "the role of the finance industry is to produce, trade and settle financial contracts that can be used to pool funds, share risks, transfer resources, produce information and provide incentives" (Thomas, 2011).

Intermediation involves the matching of lenders with savings to borrowers who need money by an agent or third party such as bank while the transfer of funds from agencies with surplus to agencies with deficit through financial intermediaries is called financial intermediation.

Financial intermediary on the other hand is an institution or individual that serves as a middleman among divers' parties in order to facilitate financial transactions. Common types include commercial banks, investment banks, stock brokers, pooled investments funds and stock exchanges. Financial intermediaries reallocate un-invested capital to productive enterprises through a variety of debt, equity or hybrid stockholding structures.

Functions of financial intermediaries are follows:

- i. Intermediaries convert savings into investments
- ii. Intermediaries like commercial banks provide storage facilities for cash and other liquid assets like precious metals.
- iii. They give short- and long-term loans by accepting deposits from the entities with surplus cash then loan them to entities in need of funds. Intermediaries give the loans at interest, part of which is giving to the depositors, while the balance is retained as profits.
- iv. They assist clients to grow their money via investment. Intermediaries like mutual funds and investment banks use their experience to offer investment products to help their clients maximize returns and reduce risk.

Advantages of financial intermediaries are follows:

- i. They help in lowering the risk of an individual with surplus cash by spreading the risk through lending to several people. Also, they thoroughly screen the borrower thus, lowering the default risk.
- ii. They help in saving time and cost. Since these intermediaries deal with a large number of customers, they enjoy economies of scale.
- iii. Since they offer a large number of services, it helps them customize the loan for small and long-term borrowers or as par their specific needs,
- iv. similarly, insurance companies customize plans for all age groups.
- v. They accumulate the process information, thus, lowering the problem of asymmetric information.

#### Small Scale Businesses

Are privately owned corporations, partnerships or sole proprietorships that have fewer employees and or less annual revenue than regular sized business or corporation Yakubu (2010).

Small scale businesses: referred to small scale enterprises as those which do not employ more than 50 employees and have initial capital equipment of ₹600,000.00 Babangida (1990). In Nigeria the Federal Government Small Scale Business Development Programs (SBDP) defines a small business as any manufacturing processing or service industry with a capital investment not exceeding ₹150,000 in machinery and equipment and employing not more than 50 workers. In its guidelines, the Central Bank of Nigeria classifies small scale business as those businesses with an annual turnover ranging from ₹1000 to ₹500,000. The third National Development Plan (1975-1980) considers small scale businesses as all manufacturing establishments employing less than 10 people or whose investment in machinery and equipment does not exceed ₹600,000.

The Small Business Administration of the U.S.A (SBA, 1953) defines small scale business as one which is independently owned and operated and not dominant in its field of operation.

The committee for economic Development standards (1980) outlined the following criteria which the small business must meet:

- i. Management is not independent.
- ii. Capital is supplied and ownership is held by an individual or a small group of people.
- iii. The area of operation is mainly local.
- iv. The business is small when compared with the highest unit in its field.
- v. The World Bank (1990) used the following criteria to classify firms as small-scale business:
- vi. Small manufacturing firms that is relatively modern.
- vii. Organized manufacturing firms such as those engaged in construction, repair, transportation and trading.
- viii. Enterprises not organized in a modern manner.

Examples include traditional artisans, petty traders and transportation owners in the informal sector. In this case, neither the number of people employed nor the amount of initial capital is specified.

In Nigeria context, a small scale business is any business that is owned, managed and controlled by a sole proprietor or partners of about two persons, has total assets of less than four million naira and a relatively small share of the market and does not have more than fifty employees.

In developing countries, the small scale business units form the nucleus of industrial momentum, employing about 30 percent of the working population.

In the United States of America, a manufacturing industry which employs up to 100 persons can still be classified as a small-scale business. In Nigeria such a manufacturing industry should definitely be termed small scale businesses Osuala (1993).

#### 2.2 Theoretical Framework

This study is anchored on the supply lead finance theory and Wicksell theory of lending and economic growth.

The Supply Led Finance Theory

This theory was first developed by Patrick in 1966, and is based on the assumption that finance is the most important variable to real sector growth, Supply led finance theory is growth inducing or growth induced, which means finance is the most significant factor for promoting economic development. The theory held that the provision of funds by financial institutions through the extension of credit to businesses support the creation, transformation, expansion of industries and developmental projects thus enhancing the growth potentials of the economy.

According to this view, the existence of financial sector as well as functioning financial intermediation in channeling the limited resources from surplus units to deficit units would provide efficient allocation of resources thereby, leading other economic sectors in the process. The supply led finance theory emphasizes that finance and economic development are mutual and causal, meaning that finance and economic development have bidirectional causality.

Wicksell Theory of Lending and Economic Growth

This theory was postulated by a Swedish economist called Knut Wicksell in 1901 with strong influence from the quantity theory of money. Wicksell based his theory on a comparison of the marginal product of capital with the cost of borrowing money. The theory by Wicksell therefore, took a monetary approach to economic growth. Wicksell argued that if the interest rate of borrowing money was below the natural rate of return on capital, entrepreneurs would borrow at the money rate to purchase capital goods. This would lead to increased demand for all types of resources and, in turn, their prices. Conversely, if the interest rate of borrowing money was above

the natural rate of return on capital, entrepreneurs would sell the capital goods and hold money. This would lead to a lower demand for money and in turn the cost of borrowing. Wicksell connected the rate of interest with the production gap. The production gap represented the variance between what ought to be produced and what is produced. This theory is important to this study since it give a direct connection between the demand for and the cost of money and output in a country. It shows how interest rates affect borrowing, which in turn affects the purchase of capital goods and how production is affected. If interest rates are higher than the natural rate of return, borrowing will reduce therefore reducing economic growth as a result of low investment. On the contrary, if the rate of interest is lower than the natural rate of return, then more borrowing will take place and this will spur economic growth through more investment.

## 2.3 Empirical review

Below are some of the works reviewed in the course of this study.

Imoughele and Ismaila (2013) also investigated the impact of commercial bank credit accessibility and sectorial 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 supplies have a long-run relationship with sectorial output performance in Nigeria.

Olukayode and Somoye (2013) evaluate the impact of finance on entrepreneurship growth in Nigeria using endogenous growth framework. The results show that the finance, interest rate, real gross domestic product, unemployment and industrial productivity are significant to entrepreneurship in Nigeria. The result shows a unidirectional granger causal relationship and suggest that access to finance by entrepreneurship has significant relationship with economic growth in Nigeria. The paper therefore recommends the formulation of effective macroeconomic policy targeted to entrepreneurship financing and growth. They recommended that monetary authorities should intervene indirectly by reducing Monetary Policy Rate (MPR) which will directly reduce the transaction costs of funds to entrepreneurship and industrial sectors. Findings the study proffered that central authority should create an enabling environment for SME development.

Afolabi (2013) evaluated the effect of SMEs financing on economic growth in Nigeria between 1980 and 2010. The study employed Ordinary Least Square (OLS) method to estimate the multiple regression models. The estimated model results revealed that SMEs output proxy by wholesale and retail trade output as a component of gross domestic product and commercial banks credit to SMEs exert positive and significant impact on economic development proxy real gross domestic product while lending rate is found to exert negative effects on economic growth.

Mohammed (2014) examined the necessity and strategies of re-positioning commercial banks in order to enhance the productive capacities of SMEs employing the Error Correction Model (ECM) and Co-Integration Test. The result showed that there was co-integration between re-positioning of commercial banks and capacities of SMEs to deliver products/services and also, there was significant dispersion resulting from lending conditions and macroeconomic variables. He concluded that the various global financial crisis really brought with it economic hazards leading to banking sector crises. It was recommended that government should relax the conditions for lending offered by the commercial Banks through the Central Bank to revitalize the capital markets and prioritize the SME in order to contribute to economic growth.

Dada (2014) investigated the effect of commercial bank's credit on SMEs development employing Ordinary Least Square (OLS) technique to estimate the multiple regression models. The findings revealed that commercial banks credit to SMEs and the saving and time deposit of commercial banks exert a positive and significant 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. The study concluded 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.

Kadiri (2012) examine the contributions of small and medium scale enterprises to employment generation in Nigeria. Using the Binomial Logistic Regression Analysis, the result revealed that the sector was unable to achieve this goal due to its inability to obtain adequate business finance for the sector. It was observed that virtually all the SMEs that were sampled relied on the informal sources of finance to start their business. As a way out, the study suggests the need for the integration of the activities of the formal with that of the informal financial institutions. However, acknowledging the role of commercial bank credit in an economy; various banking reforms have been established by the monetary authority in Nigeria in enhancing credit accessibility.

Imoughele, Lawrence Ehikioya and Ismaila Mohammed employed Co-integration and Error Correction Modeling (ECM) techniques to investigate empirically the impact of commercial bank credit on Nigeria's small and medium scale enterprises (SMEs) between 1986 and 2012. The results revealed that SMEs and selected macro-economic variables included in the model have a long run relationship with SMEs output. The study also reveals that savings time deposit and exchange rate has a significant impact on SMEs output in Nigeria. Furthermore, commercial bank credit to SMEs total government expenditure and bank density has direct but insignificant impact on the country SMEs output. This may be connected with stringent policy in accessing credit facility and the crowd out effect of government expenditure in the

economy. The study also shows that interest rate has adverse effect on SMEs output. The study recommended among others that interest rate on credit facility granted to SMEs should be drastically reduced, commercial banks should grant soft loans to this important sector of the economy and also reduce stringent policy in supply of credit SMEs and monetary authority should encourage commercial banks to set up more branches in the rural areas in order to encourage rural occupants to save and have access to credit facility.

III. RESEARCH METHODOLOGY

Research Design	Ex-post facto research design
Population of the Study	20 deposit money banks in Nigeria
Sample size	16 listed deposit money banks on Nigeria stock exchange
Sources of Data	Secondary Data for the period 1992 -2019
Techniques of Data analysis	Multiple regression
Variables	Dependent variable= Small Scale Businesses Independent variable= Deposit money bank credit to small scale enterprises, Savings and Bank total asset

The Model Specification

The functional relationships of the models are expressed as follows:

SME=f (DMB, SAV, BTA)

The specification of the multiple regression models is as follows:

 $SMEt=b0 + b_1DMB_t + b_2SAV_{t+}b_3BTA_+e_t$ 

Where:

SME= Small scale businesses in year "t"

DMB= Deposit money banks in year "t"

SAV= Savings in year "t"

BTA= Bank total asset in year "t"

t = time series for dataset

e= the disturbances term.

 $b_0 = intercept$ 

 $b_1...b_4$  = coefficients of the explanatory variables to be estimated.

# IV. DATA PRESENTATION, ANALYSIS AND RESULTS

#### 4.1 Introduction

This section of the study focuses on data presentation and analysis. Data relating to the study are presented, analyzed and the chapter also presents the test of hypotheses and discussion of findings.

#### 4.2 Data Presentation

Data relating to the impact of financial intermediation on the growth of small scale businesses in Nigeria were obtained from CBN Statistical Bulletin 2019 for all the variables used in this study. DMB=Deposit money banks, SAV=Savings, BTA=Bank total asset and SME= Small scale businesses was computed for a period of 28 years (1992-2019) as presented in Appendix.

## 4.3 Data Analysis

Data relating to the study were analyzed using Statistics/Data Analysis (STATA) software version 13.0. Descriptive Statistics, Normality, variance inflation factor, heteroscedasticity, Correlations, Hausman specification test and panel regression statistics were all performed. The results obtained from the various data analysis technique employed in the study are presented in the subsequent sections.

#### 4.3.1 Descriptive Statistics

The descriptive statistics presents a summary statistics of all the variables incorporated in the study. The basic statistics included in the study's descriptive statistics are number of observation, mean, standard deviation, minimum and maximum values of each variables contained in a study. Table 4.1 presents the descriptive statistics of the study variables.

Table 4.1: Descriptive Statistics of the Study Variables

Stats		BTA	DMB	SAV
Mean   Max   Min   Sd	2.528 7803549	6.454039 8.1199 4.8777 .986301	4.492932 5.5009 4.0313 .3627307	5.97 3.1196 .9108182
N	448	448	448	448

Source: Results from STATA 13.0

Table 4.1 presents the number of observation to be consistently 448 for all the study variables. This indicates that data employed for the study were of panel characteristics, since it includes data from CBN statistical Bulleting for a period of eight (28) years each. Also presented in Table 4.1 are the mean, standard deviation (Std. Dev.), minimum (Min) and maximum (Max) values of all the study variables.

Small scale businesses (SME) revealed a mean, standard and deviation. minimum maximum values 3.034619,0.7803549,2.528 and 4.8439 respectively. This indicates that during the period under investigation, the average value of SME stood at N3.034619 with variation in this sum amounting to 0.7803549K. The results also indicate that during the period, the minimum value of SME stood at N2.528, while the maximum stood at N4.8439. The results indicate that SME value consistently varied among the variables that formed the study and this explains the low standard deviation recorded. However, with the value recording as low as  $\aleph$ 2.528 and others as high as  $\aleph$  4.8439, there ought to be strong forces acting behind the gross

domestic product as is perceived to be one of the elements in stimulating economy growth.

Bank total asset (BTA) revealed a mean, standard deviation, minimum and maximum values of 6.454039, 0.986301, 4.8777 and 8.1199 respectively. This indicates that during the period of the study, the average value of BTA stood at \$\frac{1}{2}\$6.45, with fluctuations in the mean estimated at 0.9863014K. It also indicates that during the period under review, some of the banks had low interest rate while the maximum value of BTA stood at \$\frac{1}{2}\$8.1199 interest rate. Results from Table 4.1 however imply that some of the banks yield returns during the period of the study.

Deposit money banks (DMB) revealed a mean, standard deviation, minimum and maximum values of 4.492932, 0.3627307, 4.0313 and 5.5009 respectively. This indicates that during the study period, the average value of DMB stood at \$\frac{1}{2}\text{4.49}\$ with variations in the mean amounting to about 0.36K. The results also indicate that during the period the minimum value of DMB stood at \$\frac{1}{2}\text{4.03}\$ while the maximum stood at \$\frac{1}{2}\text{5.5}\$. This implies that the average amount of credit given to small scale businesses in relation to the total deposit during the study period stood at about 4.45 percent and this is lower than 50 percent of the total deposit. The minimum value of DMB 4.03, while the maximum value of 5.50 implies that deposit money banks credit have great impact on the growth of small scale businesses.

Savings (SAV) as presented in Table 4.1 revealed a mean, standard deviation, minimum and maximum values of 4.606625, .9108182, 3.1196 and 5.97 respectively. This indicates that during the study period, the average value of SAV stood at about 4.60 with variations to the tune of 0.91K. It also indicates that the minimum value of SAV during the period stood at about 3.12 while the maximum stood at 5.97. This implies that during the study period, the average savings in the deposit money banks at about 4.60 percent. However, the minimum value of SAV lower credit supply to the deficit unit of the economy while the maximum value 5.97 implies higher supply of credit to the deficit unit of the economy.

In order to ensure that the study data meets these assumptions, some tests such as Normality test, variance inflation factor and heteroscedasticity tests were carried out.

Table 4.2: Normality Test

Variable	0bs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
sme	448	0.0003	0.0482	13.02	0.0015
bta	448	0.6850	0.0802	3.56	0.1684
dmb	448	0.0338	0.2946	5.39	0.0676
sav	448	0.8659	0.0030	7.66	0.0217

Source: Results from STATA 13.0

Normality test result for small scale businesses (SME), Bank total asset (BTA), Deposit money banks (DMB) and Savings (SAV)

Table 4.3 Variance Inflation Factor (VIF) Statistics

Variable	l	VIF	1/VIF
sav bta dmb	•	2.13 2.04 1.19	0.469470 0.489186 0.841849
Mean VIF	   	1.62	

Source: Results from STATA 13.0

Table 4.3 presents the VIF results for the independent variables of the study arranged from highest to lowest VIF respectively. The variance inflation factor aims to detect the presence of multi-co linearity among the variables employed in a regression model. It measures the extent to which the variance of an estimated regression coefficient is inflated as compared to when the predicted variables are not linearly related. A VIF greater than 10 suggests too much correlation between the independent variables which is deemed problematic (Akpa, 2011; Gujarati & Sangeetha, 2007). The VIF of the independent variables as presented in Table 4.3 are consistently less than 10, indicating that there is no evidence suggesting the presence of collinearity among the variables.

Table 4.4 Heteroscedasticity Test

Variable	Chi <sup>2</sup> (1)*	Prob>Chi <sup>2*</sup>
GDP	3.41	0.0650

\*Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Source: Results from STATA 13.0

In order to ascertain whether the error term in the model have no constant variance, the heteroscedasticity test is employed. A regression result normally assumes that the variance of the error term is constant (homoscedasticity). If the error terms have no constant variance, it is said to be heteroscedastic. Richard (2015) posits that in the Breusch-Pagan/Cook-Weisberg test for heteroscedasticity, if the Chi-Squared value of the heteroscedasticity test is significant with p-value below an appropriate threshold (p<0.05), then there is heteroscedasticity. Therefore since the p-value as presented in Table 4.4 is 0.0650 and greater than 0.05, there is no heteroscedasticity in the model employed.

#### 4.3.2 Correlations

In order to explain the level of relationship existing between the study variables, the correlations statistics is employed. It revealed the correlation coefficient of in the independent variables and the dependent variables. The correlations statistics also revealed the relationships existing among all the study variables.

Table 4.5: Correlations Statistics

		sme	fd	dmb	sav
sme bta dmb	-  -  -	1.0000 0.5853 0.2158 -0.2045	1.0000 -0.0673		1.0000

Source: Results from STATA 13.0

Table 4.5 presents the strength and type of relationship existing between the study variables. A correlation coefficient which is 0.91 and above is considered very high, 0.71-0.90 is considered high, 0.41-0.70 is considered moderate, 0.21-0.40 is considered low and less than 0.20 is considered very low (Akpa, 2011). BTA revealed a coefficient value of 0.5853 against GDP. This indicates that there is a high and positive relationship existing between BTA and SME. This implies that an increase in bank total asset will lead to a very high increase in small scale businesses and vice versa.

DMB revealed a correlation coefficient of 0.2158 against SME. This indicates that there is a very low and positive relationship existing between DMB and SME. This implies that an increase in deposit money banks credit to small scale businesses will lead to a very low increase in small scale businesses.SAV on the other hand revealed a coefficient value of -0.2045. This indicates that there is a very low and negative relationship between SAV and SME such that, an increase in savings will lead to a very low decrease in small scale businesses.

4.3.3 Regression Results

sme	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
bta	.4698495	.1661473	2.83	0.010	.1252812	.8144179
dmb	.4402626	.352144	1.25	0.224	2900393	1.170565
sav	.1123267	.1829099	0.61	0.545	2670053	.4916587
_cons	-4.328897	1.968691	-2.20	0.039	-8.411712	2460818
R-squar	re =0.5116					
P-value	e = 0.0025					

Source: Results from STATA 13.0

Table 4.6 presents the regression results for the study model. It revealed the coefficients (Coef.), t-value (t) and the p-values (P>t) for all the independent variables of the study model. It also revealed the R-Square and P-value for the general regression results. With a p-value of 0.0025, which is significant enough to conclude that the model is fit for analysis? The R-Square in Table 4.6 which represents the coefficient of determination revealed a value of 0.5116. This indicates that 51.16 percent of the total variations in SME is jointly explained by BTA, DMB and SAV. This implies that the independent variables of the study can only account for 51.16 percent of the changes in the dependent variables, while the remaining 48.84 percent are explained by other variables not included in this model.

Table 4.6 also presents a statistical measure of the average functional relationship between the dependent an independent variables in terms of regression coefficients.BTA revealed a coefficient of .4698495. This indicates a positive relationship existing between BTA and SME. This implies that a unit change bank total asset will lead to an increase in small scale businesses to the tune of .4698495.DMB revealed a coefficient of .4402626. This indicates that there is a positive relationship existing between DMB and SME. This implies that a unit increase in deposit money banks credit to small scale businesses will lead to a corresponding increase in gross domestic product to the tune of .4402626.SAV as presented in Table 4.6 revealed a coefficient value of .1123267. This indicates a positive relationship existing between SAV and SME.

# 4.4 Test of Hypotheses

The hypotheses formulated for this study are tested in this section of the study. Each of the hypotheses is tested using the p-values as presented in Table 4.6 of the study. For each of the hypothesis, if the p-value is less than 0.05 (p<0.05), the null hypothesis is rejected in favour of the alternative hypothesis.

# 4.4.1 Test of Hypothesis One

HO<sub>1</sub>: BTA does not have any significant impact on small scale businesses in Nigeria.

Results presented in Table 4.6 revealed a p-value of 0.010 for BTA. Since 0.010 is less than 0.05, the null hypothesis that BTA does not have any significant impact on small scale businesses in Nigeria is rejected. It is therefore concluded that bank total asset have significant impact on small scale businesses in Nigeria.

# 4.4.2 Test of Hypothesis Two

HO<sub>2</sub>: DMB do not have any significant impact on small scale businesses in Nigeria.

Results presented in Table 4.6 revealed a p-value of 0.224 for DMB. Since 0.224 is greater than 0.05, the null hypothesis that DMB do not have any significant impact on small scale businesses in Nigeria is accepted. It is therefore concluded that deposit money banks credit to small scale enterprise do not have significant impact on small scale businesses in Nigeria.

## 4.4.3 Test of Hypothesis Three

HO<sub>3</sub>: SAV does not have any significant impact on small scale businesses in Nigeria.

Results presented in Table 4.6 revealed a p-value of 0.545 for SAV. Since 0.545 is greater than 0.05, the null hypothesis that SAV does not have any significant impact on small scale businesses in Nigeria is accepted. It is therefore concluded that savings does not have significant impact on small scale businesses in Nigeria.

#### V. DISCUSSION OF THE FINDINGS

The first objective of the study was to examine the impact of bank total asset on small scale businesses in Nigeria. The study revealed significant impact of bank total asset (Coef = 0.4698495, t-value = 0.010 and p-value = 0.0025) on small scale businesses in Nigeria. The result disagrees with a prior expectation of insignificant effect of savings on small scale businesses in Nigeria. Ogiriki and Andabai (2014) findings showed that savings has a positive but not significant effect on SME growth rate. This implies that if savings rate increases banks rate of income will increase too. Also, bank total asset have a significant effect on SME growth, implying that high deposit is detrimental to the growth. The result is in-line with the findings of Olowofeso, Adeleke and Udoji (2015); Nwite (2014) who found significant effect of bank total asset on small scale businesses in Nigeria. The result of this study is consistent to the findings of Nwanne (2015) who found that bank total asset has a significant positive effect on small scale businesses in Nigeria.

The second objective of the study was to determine the impact of deposit money bank on small scale businesses in Nigeria. The study revealed insignificant impact of deposit money bank (Coef = 0.4402626, t-value = 0.224 and p-value =0.0025) on small scale businesses in Nigeria. This result is consistent with prior findings of insignificant effect of credit to private sector on small scale businesses in Nigeria. Olowofeso, Adeleke and Udoji (2015) findings also indicated that credit to private sector has a negative and significant effect on small scale businesses. This means that the credit facilities granted to the private sector of the economy by banks do not add value probably due to high interest charged. Thus, firms using the credit facilities might end-up paying interest that is higher than the profit they make in a particular period. This result contradicts the findings of Nwite (2014) who found a positive and statistically significant effect of private sector credit on small scale businesses in Nigeria. The result is contrary to a prior expectation of a significant positive effect of credit to private sector on SME growth. It means that at low levels of financial stability financial market participants might be too risk averse and hoard liquidity rather than extend loans to real sector. In this case, improvements in financial stability will have insignificant impact on small scale businesses in Nigeria. As financial stability reaches some intermediate level it starts to ensure economic development. However, economic development reverses if financial system is excessively stable and financial intermediaries keep more capital and liquidity than what is needed.

Financial intermediation (deposit money banks) does not have a causal effect on small scale businesses in Nigeria, contrary to several empirical studies which testify that financial intermediation causes growth. By implication, this could be explained by unproductive investments (which are centered on the means and not the results), corruption and especially the diversions of funds in the attribution of government contracts which brings a bad quality of realization, or the period of

study which would be very large and the effects are felt on the results.

The third objective of the study was to determine the impact of savings on small scale businesses in Nigeria. The study discovered insignificant impact of savings (Coef = 0.1123267, t-value = 0.545 and p-value = 0.0025) on small scale businesses in Nigeria. This deviates from the previous expectation of a significant positive effect of money supply on SME growth. Furthermore, lending rate exhibits a positive effect on unemployment rate. The finding is consistent with Yusifzada and Mammadova (2015) who examined financial intermediation and small scale businesses in Nigeria. They found that financial depth does not fully reflect how well the financial intermediaries serve to economic agents in stimulating small scale businesses in Nigeria. According to the study additional aspects of financial system such as access, efficiency and stability should be taken into account in order to shed light into the relationship between finance and small scale businesses in Nigeria. Badun (2006) reviewed empirical research on the link between financial intermediation by banks and small scale businesses in Nigeria. Special attention was paid to the issues of causality, nonlinearity, time perspective, financial intermediation proxies, and interaction terms. The review showed that there are still quite a few unresolved issues in empirical research, which causes skepticism towards prioritizing financial sector policies in order to cause small scale businesses in Nigeria. According to the study, progress in the finance and growth literature is slow and researchers seem to go round in circles. The study recommended a possibly fruitful direction for future empirical research as the relationship between government and banks, especially from the standpoint of political economy.

The implication of this finding is that financial intermediation activities indices in the study could have explain some level of greater proportion of changes in small scale businesses in Nigeria. However, it was found out that the indices have insignificant impact and unexpected relationship with small scale businesses in Nigeria, indicating that the banking intermediation role has not been completely explored on the small scale businesses in Nigeria. This might due to the level of intractable challenges and complexity in implementing policies that may enhance the smooth flow of financial intermediation to achieve the desired results.

## VI.CONCLUSIONS

The study impact of financial intermediation on the growth of small scale businesses in Nigeria. The study proved sector on small scale businesses in Nigeria. It also emerged that, disaggregate (sector specific) approach to the impact of credit supply to small enterprises has not impacted small scale businesses significantly. In Conclusion, the volume of credit to private sector do not really contribute positively to the development of the economy of Nigeria in terms of enhancing small scale businesses. Although banks are still deeply challenged on many levels, their ability to stimulate growth is

not in question in Nigeria. This study strongly affirms that for there to be significant growth, financial intermediaries are needed to effectively bridge the gap between savers and borrowers that is inherent in direct financing or self-financing and by extension accumulate huge funds and efficiently allocate them to the real sector for their capital expenditure and production needs. Thus, the policy implication is for regulatory authorities and banks in particular, to correct all challenges identified in this study and continue to exact measures to liberalize the financial service sector to avoid any form of shocks that will impair economic progress.

#### VII. RECOMMENDATIONS

From the finding of this study, the following recommendation is made:

It has been observed that there is no efficient wide spread of financial intermediation in the small scale businesses in Nigeria which is due to the underdevelopment of most rural areas. This can be resolved by enhancing the development of the rural areas through the provision of amenities. As a result of this, more financial intermediaries will be encouraged to establish its branches in such rural areas. From the study it was also established that the savings has significant impact on small scale businesses growth which is returns from labor force of the Nigerian economy. This is indicated by the longrun relationship between total labor force and the growth small scale businesses in Nigeria. The Government should provide more job opportunities and also support the formulation of small and medium scale businesses (SMEs') by encouraging the financial intermediaries through the central bank of Nigeria (CBN) to provide credits for small and medium enterprises. This will lead to the expansion of such SMEs'

## **REFERENCES**

- Adjekughele A.A (2016). Effect of Rehabilitation Programs on persons with disabilities in Bayelsa State; A study of Yenagoa Local Government Area. An unpublished M.Sc. thesis. Faculty of Social Sciences, National Open University of Nigeria.
- [2] Aniawodzi, A.K & Adade, T.C(2012). Access to credit and growth of small and medium scale enterprises in the Ho Municipality of Ghana. British Journal of Economics, Finance & Management Sciences, 6(2) 34-51.
- [3] Aliyu, S.M & Bellow, G.B (2013). An assessment of the contribution of Commercial Banks to the Growth of Small and Medium Scale Enterprises in Nigeria International Journal of Research in Social Sciences,2(4) 47-55.
- [4] Amonoo, E. Acquah, P.K & Asmah E.E (2003). The Impact of Interest Rates on Demand for Credit & Loans Repayment by the Poor and SMEs in Ghana (IFLIP research paper03-10). Geneva; International Labour Organization.
- [5] Aremu, M.A (2004). Small Scale Enterprises Panacea to Poverty Problem in Nigeria, Journal of Enterprises Development, International Research and Development Institute, Uyo, Akwa Ibom, Nigeria. 1(1);1-8.
- [6] Aguwamba Sunday M. & Ekienabor Ehijiele E. (2017) Bank Lending and Its Impact on Small Scale Enterprises in Nigeria. Imperial Journal of Interdisciplinary Research (IJIR) vol.3 issue-3, 2017.
- [7] Brevoort, K. Pand Hannan, T.H. (2006); "Commercial Lending and Distance: Evidence from Community Reinvestment Act Data"

- Journal of Money, Credit and Banking, Vol. 38, No. 8, PP. 1991-2012
- [8] Chiou J. WU, P & Huang, B(2011). How Derivatives Trading among Banks Impacts SME Lending. Inter-disciplinary Journal of Research in Business, 1(4), 1-11.
- [9] Friday E. Akpan (2007) Advance Financial Management (An analytical Approach). Published by Larigraphics, Jos .https://www.iiste.org/journals/index.php/JEPER/index
- [10] John –Akamelu Chitom R. & Mougbo Uju S. (2018) The Role of Commercial Banks in Financing Small & Medium Size Enterprises in Nigeria. European Journal of Business, Economics and Accountancy Vol. 6, No 3, 2018. ISSN 2056 – 6018. https://www.idpublications.org.(PDF)
- [11] Kurotimi M.F (2018). The Practice of Entrepreneurship in the 21st century. Published by University Press PLC.
- [12] Leady, P.D (1989). Practical Research: Planning & Design Macmillan Publishing Company, New York.
- [13] Mamman .A. and Aminu .K.S (2013) Effect of 2004 Banking Reforms on Loan Financing of Small and Medium Scale Industries in Nigeria. International Journal of Small Business and Entrepreneurship Research, 1(3), 44-53.
- [14] National Open University of Nigeria, (2008). Small Business Management (MBA 883). Printed by ELL Ventures International.
- [15] National Open University of Nigeria (2014). Entrepreneurial Development and Small Business Management. MBA (896).
- [16] Nwosu P.I & Oseni I.O (2013). The Impact of Bank Loans to SMEs on Manufacturing Output in Nigeria. Journal of Social and Development Sciences, 4(5), 212-217.
- [17] Obamuyi T.M (2011). Comparative Loan Performance in Banks and Micro-credit Institutions in Nigeria: A case study of Ondo

- State. Global Journal of Management and Business Research, 11(4).
- [18] Omah. I, Durowoju S.T, Adeoye A.O & Elegunde A.F. (2012). Post Bank Consolidation: A Debacle in the Survival of SMEs in Nigeria "An Empirical Study" Australian Journal of Business & Management Research, 2(8), 1-6.
- [19] Oke M.O and AlukoO.A (2015). Impact of Commercial Banks on Small and Medium Enterprises financing in Nigeria. 10SR Journal of Business and Management (10SR-JBM) Volume 17, issue 4.Ver.1 (April.2015),PP 23-26.
- [20] Osuala E.C (1993). Principles and Practice of Small Business Management in Nigeria. FulladuPublishing Company, Nsukka, Nigeria.
- [21] Osuala E.C (2005). Introduction to Research Methodology. African–First Publishers Limited, Onitsha, Nigeria.
- [22] Page .S. (1995). Introductory Marketing. Stanley Thorns' Publishers Ltd, London.
- [23] Qazim Tmava, Florin P. & Gazmend L. (2013). The Role of Banks in Small and Medium Enterprises Financing: A case Study from Kosovo. URL:http://dx.doi.org/10.5539/ijef.V5n12p94.
- [24] Roseline Oluitan (2014). The Impact of Commercial Bank Funding on Small and Medium Scale Enterprisesin Nigeria: international Journal of Financial Markets, Vol.1 No. 2, 2014, PP62-69.
- [25] Thornton J. (1991), "The Financial Repression Paradigm: A Survey of Empirical Research, Saving and Development, Vol. XV, No. 1 PP 5-16.
- [26] A.G. Hall and K.M. Hall (1999). "Modern commerce". An introductory Course: Published under license in Nigeria by Heinemann Educational Books (Nigeria) PLC and printed by Ibrash Publications Centre Ltd, Lagos. Page 67.