

Impact of Banking Sector Credit on the Growth of Small and Medium Enterprises (SME's) in Nigeria

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Abstract

This study examines the impact of banking sector credit on the growth of small and medium enterprises in Nigeria. The main objective of the study is to investigate whether banking sector credit has significant impact on the growth of small and medium enterprises in Nigeria. As part of the methodology, annual data between 1985 and 2010 was collected and used in the study while descriptive statistics, correlation matrix and error correction model was used to test the formulated hypotheses which reveals that banking sector credit has significant impact on the growth of small and medium enterprises in Nigeria as it has positive impact on some major macro-economic variables of growth such as inflation, exchange rate, trade debts etc. The study however, recommends that financial lending institutions (Monetary Authorities) should relax the stringent conditions associated with credit facility in the funding of SMEs in the country so as to encourage easy accessibility of loans which will help in improving SME's financing and performance.

Keywords: Banking Sector Credit, SME Financing, Growth, Small and Medium Scale Enterprises, Nigeria

1. Introduction

The quest for increased productivity and overall growth of the country's domestic economy has become significant to succeeding governments in Nigeria since country's independence in 1960. The Federal Government had since come up and implemented various national economic policies aimed at boosting productivity and diversifying the domestic economic base which helps in promoting small and medium scale businesses in the country. Since the adoption of Structural Adjustment Programme (SAP) in Nigeria in 1986, there has been a paradigm shift from the ostentatious, capital intensive, large scale industrial project based on the philosophy of import substitution and export promotion to small scale enterprises (SME's) with immense potentials for developing domestic linkages for rapid and sustainable economic growth. Apart from their potentials for ensuring a self-reliant industrialization, in terms of ability to rely largely on local raw materials, SME's are also in a better position to boost the use of domestic raw materials as input, this has helped in creating so many job opportunities; guarantees even distribution of infrastructural development in both the urban and rural areas in the country and facilitate the growth of non-oil exports (Imoughele, Lawrence & Ismaila, 2012).

According to report of the United Nations Industrial Development Organization (UNIDO, 2012) SMEs have a significant role to play in economic development of any nation as they formed the backbone of the private sector; they make up over 90 percent of entrepreneurs of the world and account for 50 to 60 percent of employment generation; they also play an important role in poverty alleviation. In spite of the important role of SMEs to the development of Nigeria's economy, it is still been constrained by so many factors such as inadequate capital, stringent conditions on bank credit facility, poor management and faulty implementation of government policies on SME's which retards the development of the sector (Abiola *et al*, 2011).

Even though, bank credit plays a crucial role in providing external financing to SME's in Nigeria, the major source of finance for SME's in the country is apparently non-functional (Kadiri, 2012). SME's occupies a strategic place in virtually every country or state and they have been fully recognized by government and development experts as the main engine of economic growth and a major factor in promoting private sector development and partnership (Gbadi & Amisah, 2014). They are the principal catalysts for achieving equitable and sustainable industrial diversification; in most countries, SMEs account for well over half of the total share of employment, sales and value added within an economic system (Soludo, 2008).

It is in view of this that the study was conducted to investigate the impact of banking sector credit on the growth of SME's in Nigeria. Even though, several studies (Nwosa & Oseni, 2013; Mamman & Aminu, 2013) have studied bank credit to SMEs, in different dimensions. Nwosa and Oseni (2013) investigated the determinants of commercial banks' lending behaviour in Nigeria their study did not pay attention to the impact of banking sector credit on small and medium enterprises in Nigeria which this study is designed to accomplish. Therefore, this study which focuses only on SME's sector and formal channel of financing attempts to look more critically into this discourse, whilst taking into cognisance more variables that could impact on lending and add to existing body of knowledge.

1.1 Statement of the Problem

Small and Medium Enterprise (SME'S) are acknowledged having huge potential for employment generation and wealth creation in any economy besides other immeasurable virtues. The sector had been stagnated and remains relatively small in terms of its contribution to GDP or to gainful employment in Nigeria. Although indicators show that the sector had improved significantly since 1999, but it is still however far from meeting the targeted ideals as the sector is faced with a number of

constraints such as the lack of credit availability which hampers the growth of small scale businesses in Nigeria. The inability of small scale businesses to access finance is compounded by financial institutions unwillingness to lend to them long-term loans because they are considered highly vulnerable to high credit risk incidence; this has resulted to large number of SMEs' failures due to funding problems (Abiola *et al.*, 2011). This study examines how the lack of bank credit hampers the growth of SME's in Nigeria. It is in view of this that the following research question was raised:

1.2 Research Question

To what extent Banking Sector Credit Impact on the Growth of SME's in Nigeria?

1.3 Objectives of the Study

The main objective of the study is to investigate whether banking sector credit has significant impact on the growth of small and medium enterprises in Nigeria. The specific objectives are to; assess the effect of banking sector credit on macro-economic variables. In order to achieve the stated objectives, the following hypothesis was formulated:

H₁: Banking Sector Credit has no significant impact on the growth of small and Medium Enterprises in Nigeria.

2. Literature Review

2.1 Concepts of Small and Medium Enterprises (SME's).

The term Small and Medium Scale Enterprises (SME's) has no generally established definition. Kadiri (2012) noted that the criteria for classification of an enterprise as small, medium or large varies from one country to another, depending on whether it is developed or developing country. A small business for example to one country may be a large-scale business to another. Thus, SME's in Nigeria, as defined by Small and Medium Industries Equity Investment Scheme (SMIEIS), are enterprises with a total capital employed not less than ₦1.5 million, but not exceeding ₦200 million, including working capital, but excluding cost of land and/or with a staff strength of not less than 10 and not more than 300. Esuh and Adebayo (2012) noted that 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 SME's are the smallest among the three categories. In the word of Afolabi (2013) "they are businesses that employ up to 9 employees in UK, while in Australia they employ fewer than 5 employees including non-employing businesses". According to US Census Bureau, micro businesses are categorized as SOHO meaning Small Office-Home Office. Therefore, micro businesses should be seen as the small 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.

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. According to Afolabi (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 defined medium businesses as enterprises which employ fewer than 250 persons and/or have an annual balance sheet total not exceeding EUR 43 million.

2.2 Main Sources of Financing SMEs in Nigeria

The importance of finance to business organisations cannot be over-emphasized. Business finance is however, not easy to source especially in respect of SMEs. Yet they require funds from every source available to meet their asset needs, working capital needs, and for expansion. Accordig to Ekpenyong and Nyong (1992), there is wide consensus in Nigeria that government policies are skewed in favour of the formal sector to the detriment of the informal sector. This skewness is to the great disadvantage of SMEs in Nigeria since they are more disposed to the funds of the informal sector (Ohanga, 2005). The commercial banks, merchant banks, micro-finance banks and development banks constitute the formal sources of finance to SMEs. The financial system in Nigeria is not in short supply of liquidity, but banks have been very reluctant to grant loans to SMEs, which they regard as a high-risk sector. Most of these banks would rather pay the penalty imposed for not meeting the minimum credit requirement to this preferred sector of the economy than actually run the risk of exposure to the risk.

According to Ojo (1984), the sources of investment fund for SMEs include owner's savings and assistance from banks, government institutions, local authorities, co-operative societies, relatives and friends, and money lenders. Findings of the study showed that almost all the funds came from personal savings (96.4%) with about 3% from the informal sector and 0.21% from the formal financial institutions. This trend was further established by 1983/84 study by the Nigerian Institute for Social and Economic Research (NISER). NISER findings showed that about 73% respondents raised their funds from personal savings, while only about 2% obtained their funds from the formal financial institutions. The inability of banks to provide the required credit to SMEs, led to the reliance of entrepreneurs on personal savings and assets for their working capital needs thus making it difficult to operate at full capacity and increase output and sales. The shortage of finance also limits investment in research to improve technology and to expand operations. As a result of the foregoing, banks resort to heavy asset-based lending rules.

2.3 Challenges of Banking Sector Credit in Financing SME's in Nigeria

It is generally accepted by both the practitioners and academics that SMEs serve as catalysts for economic growth of the economy of any nation. However, SMEs are faced with many challenges in Nigeria; one of the major challenges faced by SMEs is inadequate capital to finance their operations (Fatai, 2009). Empirical evidence shows that financing contributes about 25% to the success of SMEs in Nigeria (Ogujuiba *et al*, 2004). A World Bank report showed that 39% of small scale firms and 37% of medium scale firms in Nigeria are financially constrained. Many SMEs in Nigeria lack the capital to continue their business and they are forced to wind up because they are unable to access the required funds.

A 2001 World Bank survey on Nigeria showed that although 85% of the firms had relationship with banks, most of them had no access to their credit (Terungwa, 2011). The lack of adequate financing for the SMEs is traceable to among other reasons the reluctance of banks to extend credits to them for the following reasons; Inadequate collateral by SMEs operators, weak demand for the products of SMEs as a result of the dwindling purchasing power of Nigerians, lack of patronage of locally produced goods and poor management practices by SMEs operators.

2.4 Empirical Literature

Mamman and Aminu (2013) assessed the effect of 2004 banking reforms on loan financing of SMEs in Nigeria. A sample size of 500 was randomly chosen and chi-square test was used which indicated that there is no significant effect of 2004 banking reform on loan financing of SMEs in Nigeria and suggested that there are some constraints which restricted access to loans from the banks for SMEs in Nigeria. Aliyu and Bello (2013) examined the contribution of commercial banks to the growth of SMEs in Nigeria between 1980 and 2009. Using ratio analysis and trend analysis, it was discovered that commercial banks contribute to financing SMEs but their contribution has declined as the government through CBN directives abolished the mandatory bank's credit allocations.

Nwosa and Oseni (2013) examined the impact of bank loans to SME's on manufacturing output in Nigeria for the period spanning 1992 to 2010. Employing error correction modelling technique, the study deduced that bank loans to the SME sector had significant impact on manufacturing output both in the long and short run. Omah, Duruwoju, Adeoye and Elegunde (2012) examined the impact of post-bank consolidation on the performance of SMEs in Nigeria, with special reference to Lagos State. A sample size of 50 was drawn from the supra-population of the study within Ikeja Local Government in Lagos State. Applying mean, standard deviation and coefficient of variation in its data analysis, the study revealed that SMEs do not have better access to finance through banks, due to neo-reorganisation in banks as a result of post-bank consolidation and SMEs do not have absolute rapport with the financial institutions due to their financial background in Nigeria.

Dada (2014) noted that the consistently repeated complaint of SMEs about their problem regarding access to finance is highly relevant constraint that endangers the development of the sector in Nigeria and investigating the effect of commercial banks' 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.

Qureshi (2012) examined the problems and constraints faced by small and medium-sized enterprises (SMEs) in Pakistan with regard to access to financing. The research methodology includes qualitative data and quantitative data. A survey was undertaken from a sample group of 500 respondents in Karachi from whom various questions were asked through a structured questionnaire. In addition, one-on-one formal and informal interviews were taken from various businessmen and bankers. Samples were selected conveniently. A conceptual model/framework was devised to test and ascertain the statistical validity. It includes dependent variable SME financing and independent variables, financing constraints, functional/internal barriers, government support and incentives, and SMEs growth and development. The study finds that Formal financing is the biggest problem of SMEs because a substantial portion of SMEs does not have the security required for collateral. The loan processing time is very lengthy and cumbersome and the loan terms are not succinct and thoroughly understood by the borrower which is a similar scenario to the Nigerian situation.

3. Research Methodology

This research uses time series data and we see the population from a time base rather than cross-sectional items. Therefore, the population of this study covers the entire life history of Nigeria since independence (1960-2015). While it may not be possible to study this entire period due to data constraints we adopted a judgmental sampling technique that adopted sample size for this study which covers the period 1985 to 2010. This period is adopted because of the non-availability of complete data. The study sourced data from published annual reports and daily official list of the Nigerian Stock Exchange (NSE) and Securities and Exchange Commission (SEC), Nigerian Investment Promotion Commission (NIPC), Federal Ministry of Finance, Bureau for Public Enterprises (BPE) and World Bank Reports (WBRs). Specifically the credit rationing data extractions from Central Bank of Nigeria Statistical Bulletin was used.

The methods of data analysis involve the use of descriptive statistics and correlation matrix test which helps in describing the nature of our data. In testing the hypothesis, the use of econometric techniques was employed as unit root test – ADF and co-integration test were conducted. Co-integration test was used to

examine the stable long run relationship between the dependent and independent variables before running the error correction model (ECM) regression analysis. The co-integration test is conducted using Granger and Engle two stage techniques which were analyzed using E-views (Version 8.0).

3.1 Model Specification

In this study, we seek to examine the impact of banking sector credit on Small and Medium Enterprises Growth (SMEG) in Nigeria. The dependent variable for the study was growth rate of SME's while the explanatory variables were Banking Sector Credit which was proxy by Average Banking Deposit ((DEFB) and Trade Debt (TRADB); Contribution to Small and Medium Enterprise Sector (CSMES), Exchange Rate (EXRT) and Inflation Rate (INFL). In the light of this, a multiple regression model is specified; the functional form of the model is expressed as follows:

$$SMEG = F(DEFB, TRADB, SECTQ, EXRT, INFL) \dots\dots\dots \text{equation (1)}$$

Therefore, multiple regression models with an error term (\mathcal{E}_{it}) is specified in econometric form as models I respectively as shown below:

$$\text{Model 1: } SMEG_t = \alpha_0 + \alpha_1 DEFB_t + \alpha_2 TRADB_t + \alpha_3 SECTQ_t + \alpha_4 EXRT_t + \alpha_5 INFL_t + \hat{\epsilon}_t \dots\dots\dots \text{equation (2)}$$

3.3 Error Correction Model

This study adopted the Error correction model as suggested by Gujarati (2009) in examining the long-run and short-run dynamic relationship in equation (1) and (2). This includes the error correction coefficient (β) and short run coefficient (α) which measures the long-run and short-run relationship between the dependent variable and the independent variables. This therefore necessitates the need to re-specify both equation (1) and (2) in an error correction model form as;

$$\text{Model 1: } SMEG_t = \alpha_0 + \alpha_1 DEFB_t + \alpha_2 TRADB_t + \alpha_3 SECTQ_t + \alpha_4 EXRT_t + \alpha_5 INFL_t + \beta_6 ecm(-1) + \hat{\epsilon}_t \dots\dots\dots \text{equation (3)}$$

Where;

Dependent Variables;

SMEG = small and medium scale sector growth. This represents the historical annually small and medium scale sector series for the period of 1980 to 2010 in Nigeria.

Independent Variables:

DEFB = is an indirect proxy for banking sector credit. It is measured by dividing by banking sector deposit to total asset for the period of 1985 to 2010 in Nigeria.

TRADB = is an indirect proxy of banking sector credit. It is measured by dividing trade credits by domestic debt for the period of 1985 to 2010 in Nigeria.

SECTC = this is the ratio of bank credit to SMEs sectors for the period of 1985 to 2010 in Nigeria. We expect a positive relationship between sectorial bank credit allocation and outputs from SMEs sectors.

EXRT = exchange rate. This represents the historical annually naira-dollar exchange rate for the period of 1985 to 2010 in Nigeria. We expect a negative relationship between exchange rate and outputs from SMEs sectors.

INFL = inflation rate. This represents the historical annually consumer price index for the period of 1985 to 2010 in Nigeria. We expect a negative relationship between inflation rate and outputs from SMEs sectors.

Et = stochastic disturbance term assumed to satisfy the usual properties of zero mean, unit variance and zero covariance, introduced to account for the non-deterministic nature of the specification.

4. Results and Discussions

4.1 Introduction

In this study, we seek to examine the impact of banking sector credit on Nigeria's Small-Scale Sectors. The dependent variable was small and medium scale growth rate. while the explanatory variables were banking sector credit which was proxy by DEFB and TRADB; sectorial contribution to small and medium sector enterprise respectively (SECTC), exchange rate (EXRT), inflation rate (INFL). In estimation of the model, econometric estimation techniques were adopted. The estimation start with the computation of descriptive statistics, Pearson correlation coefficient of the variables, Unit root and co-integration test. The unit root test will provide information on the stationarity properties of the variables and this will be conducted using the Augmented Dickey Fuller (ADF) test. In the case of co-integration test, the Engel and Granger two stage techniques was adopted. The co-integration test provides information on the existence of long-run stable relationship between the dependent and explanatory variables. These tests will form the basis for the short run dynamic error correction model.

4.2 Descriptive Statistics

The descriptive statistics shows the description of the mean, standard deviation and normality test. Table 4.1 is the descriptive statistics of the variables under consideration for the periods 1985 to 2010.

Table 4.1: Descriptive Statistics

Variables	Mean	Standard Dev	Jarque-Bera	Observation
SMEG	7.719474	1.594053	2.173(0.3)	19
INFL	22.08842	21.05502	7.532(0.0)	19
EXRT	98.73441	41.04127	2.432(0.2)	19
TRADB	0.972368	0.844468	12.644(0.0)	19
DEFB	5.648632	0.6603	1.241(0.5)	19
CSMES	39219.13	21746.85	2.042(0.3)	19

Source: Author (2015)

The historically average SME Growth (SMEG) was, 7.719474 and a standard deviation of 1.594053;

the low standard deviation of the explained variable, when compared to the mean shows that there has been more stability in output from the sectors in Nigeria over the period of study. From the analysis, inflation rate (INFL) was averagely 22.08842 and a standard deviation of 21.05502. The standard deviation of inflation rate when compared to the mean it shows that there has been a high variation between inflation and output from these sectors in Nigeria. Exchange Rate (EXRT) had an average value of 98.73 and the standard deviation was 41.04. This means that the period under study was also characterized by exchange rate variations. Trade Debts (TRADB) had an average value of 0.972368 and a standard deviation of 0.844468. This showed that TRADB were characterized with variations during the period of study. Historically average banking deposit ((DEFB) was 5.648632 and a standard deviation of 0.6603 while the standard deviation of banking deposit, when compared to the mean it shows that there has been a low variation over the period. In our period of study, the historically average level of sector output contribution in small and medium enterprise (CSMES) was 39219.13 and a standard deviation of 21746.85. Here also, the high standard deviation shows that there is a presence of variation in bank credit allocation in relation to SMEs output in Nigeria.

4.3 Correlation Matrix

Table 4.2: Pearson Correlation Coefficients Results

	<i>SMEQ</i>	<i>INFL</i>	<i>EXRT</i>	<i>TRADB</i>	<i>DEFB</i>	<i>CSMES</i>
SMEQ	1					
INFL	-0.19411	1				
EXRT	0.512773	-0.78009	1			
TRADB	0.713417	-0.39683	0.623747	1		
DEFB	0.763988	-0.60799	0.894124	0.825248	1	
CSMES	-0.3589	-0.34865	0.31119	-0.2645	8.7E-05	1

Source: Author (2015)

SME Output (SMEQ) has weak negative correlation relationship with Inflation rate (INFL = -0.19), a fair positive association with exchange rate (EXRT =0.51), a strong positive relationship with Trade Debts (TRADB = 0.71), a strong positive relationship with Banking Sector deposits (DEFB = 0.76), and a fair negative relationship with Sectorial loan to SMEs (CSMES = -0.35). Our Observation therefore shows that, trade debts, banking sector deposits are more associated with SME Output, and has the capacity to influence output. While exchange rate shows a fair relationship with inflation rate, exchange rate, and sectorial loans to SMEs has less influence on output.

4.4 Unit root test

Unit root test in this study is use to investigate whether or not SME growth (SMEG), inflation rate (INFL), exchange rate (EXRT) Trade debts (TRADB), Banking sector deposits ((DEFB), Sectorial loan to SME (CSMES) time series are stationary and to find out their order of integration. Table 4.3 and 4.4 shows results for the unit root test for the variables at levels and first-difference using Augmented Dickey-fuller (ADF) test.

Table 4.3: Augmented Dickey-Fuller Unit Root Test at Level

	Variable	ADF Statistics	ADF (95%)	Order of Integration	Remark
Level	SMEQ	-1.66077	-2.96777	I(0)	Non-Stationarity
	INFL	-2.88189	-2.96777	I(0)	Non-Stationarity
	EXRT	-0.08398	-2.96777	I(0)	Non-Stationarity
	TRADB	2.927464	-2.97626	I(0)	Non-Stationarity
	DEFB	1.286927	-2.96777	I(0)	Non-Stationarity
	CSMES	-1.42795	-3.04039	I(0)	Non-Stationarity

Source: Author (2015)

The empirical findings from the Table 4.3 reveal that SME growth (SMEG), inflation rate (INFL) exchange rate (EXRT), Trade Debts (TRADB), Banking deposits ((DEFB), SME (CSMES) were non-stationary at level. This therefore means that using the OLS regression techniques at levels in estimating our formulated model would lead to spurious regression results since some of the variables were not stationary at level. In order to resolve this problem, the first differences of the variables were taken and they were subjected to ADF Unit root test. Table 4.4, shows the results of the Unit root test at first difference using ADF test.

Table 4.4: Augmented Dickey-Fuller Unit Root Test at First Difference

	Variable	ADF Statistics	ADF (95%)	Order of Integration	Remark
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Source: Author (2015)

The empirical findings from the Table 4.4 reveal that SME growth (SMEG), inflation rate (INFL) exchange rate (EXRT), Trade Debts (TRADB), Banking deposits ((DEFB), SME (CSMES) were stationary at first difference. This therefore means that using the OLS regression techniques at levels in estimating our formulated model would lead to spurious regression results since some of the variables were not stationary at level. This in other word means that after taking the first-difference of the variables and testing for their stationarity property, they all became stationary. This therefore means that the best regression results will be

obtained when the first differences of the variables are used to estimate the model. The results also shows that the variables are all integrated of order one.

4.5 Co-integration Test

Table 4.5: Model 1

	Variable	ADF Statistics	ADF (95%)	Order of Integration	Remark
Level	ECM	-3.1676	-3.04039	I(0)	Stationarity

Source: Author (2015)

The results from Table 4.5 shows that the absolute value of the ADF statistic (-3.1676) was greater than the absolute value of the ADF critical value at 5 % level of significance (-3.04039). This implies that the dependent variable and independent variables are co-integrated. This in other words means that between 1981-2010 periods, there was a long run stable relationship among SME growth (SMEG), inflation rate (INFL) exchange rate (EXRT), Trade Debts (TRADB), Banking deposits ((DEFB), and Sectorial loan to SME (CSMES.) in Nigeria such that any divergence in their behaviour in the short run will converge in the long run. Engel *et al* (1987) postulated that any co-integrated series has an error correction representation. Therefore, the existence of co-integration in our model necessitates the formulation of the error correction model. The error correction model when estimated represents the short run dynamics of the model. The existence of co-integration among the variables justified the use of error correction model in this study.

4.6 Error Correction Model (ECM)

In order to explain the short-run deviations that might have occurred in the estimating the long-run co-integrated equation and to test our formulated hypotheses, the error correction model was taken and presented in Appendix I. Model 1 in this study investigates the impact of banking sector credit in Small and medium enterprise in Nigeria (Appendix I).

From the results of the over parameterized and parsimonious ECM as presented in appendix I, The results obtained from the model revealed that the adjusted R-squared value of 0.48 shows that 48% of the systematic variation in the dependent is jointly explained by the independent variables in the parsimonious ECM model. This clearly shows that about 52% of the systematic variation in SME output was not explained by the independent variables in the model. This indicates that more research that would investigate other variables that are outside the variables in this study needs to be conducted to improve the adjusted R-squared. The F-statistics value of 2.23 and its associated p-value 0.22 show that the model overall is statistically insignificant.

Added to the aforementioned, the below provide a specific discussion on each variables; Banking Sector deposits, which is a major explanatory variable in this study had two lags, which are D (DEFB) and D (DEFB (-1)), among which both variables had a significant effect on SME output. Specifically, D (DEFB) had a positive (14.81909) on output which is significant at 1% level (P-value=0.0553). This indicates that banking sector deposit impacted positively and significantly on output. While D (DEFB (-1)), had a negative (-17.1345) on output which is significant at 1% level (P-value=0.0314). This indicates that banking sector deposit in the second lag period impacted negatively and significantly on output.

Trade debts, another explanatory variable in our study, had one lag, which is; D (TRADB (-1)). D (TRADB (-1)) had a positive (2.261127) on output which is significant at 1% level (P-value=0.046). This simply indicates that Trade debts impacted positively and significantly on SME output. Our findings therefore suggest that we should reject the null hypothesis which says:

Banking Sector Credit has no significant impact on the growth of small and Medium Enterprises in Nigeria.

4.7 Major Findings

Since the main objective of the study is to investigate whether banking sector credit has significant impact on the growth of small and medium enterprises in Nigeria, the study found that banking sector credit has significant impact on the growth of small and medium enterprises in Nigeria as it has positive impact on some major macro-economic variables of growth such as inflation, exchange rate, trade debts, average banking sector deposits, contributions to SME's etc. From the analysis on inflation rate, it shows that there has been a high variation between inflation and output from the sector in Nigeria while Trade Debts were characterized with variations. Banking Sector Deposit shows that there has been a low variation over the period. The study also, show variation in the contribution of SMEs output in Nigeria as the output has weak negative correlation relationship with Inflation rate. The finding further reveals that, trade debts, banking sector deposits are more associated with SME Output, and has the capacity to influence output. While exchange rate shows a fair relationship with inflation rate, exchange rate, and SME sector loans has less influence on output. On Loan to SMEs, the study found that increase in SME sector loan would significantly increase SME growth while on Inflation rate; it reveals that increase in inflation rate would significantly affect SME growth in Nigeria. Analysis from the Exchange rate variable show that changes in exchange rate has significant negative effect on SME growth in Nigeria. Also, we found that there is absence of autocorrelation in the model.

5. Summary, Conclusion and Recommendations

5.1 Summary of Findings

In this study, we seek to examine the impact of banking sector credit on growth of small scale enterprise in Nigeria. The

dependent variable was SME growth while the explanatory variables were banking sector credit which was proxy by DEFB and TRADB; contribution to small and medium enterprise sector (CSMES), exchange rate (EXRT), Inflation rate (INFL). In estimation of the models formulated, statistical techniques which include descriptive statistics, correlation analysis, unit root test, Engel-Granger co-integration test, over parameterized and Parsimonious error correction model (ECM). The results from all our analysis, show that Banking sector credit had a statistically significant relationship with growth of SMEs in Nigeria. We also learn from our analysis of macroeconomic variables such as exchange and interest rates negatively and positively significant respectively.

5.2 Conclusion

In conclusion, from the empirical and analytical findings the results reveals that Banking sector credit was important but insignificant in understanding growth variations in Nigeria's Small and Medium Sector. The implication to the study is for banks to understand that irrespective of the size of SME's, banking sector credit is an important factor to the overall success of SME's in Nigeria which is a catalyst for Nigerian economic growth. The current priority attention being accorded the banking credit sector by government is well deserved. This is because the sector has great potentials to be the engine of growth in Nigeria. In the face of rising unemployment and high poverty levels, growth generated from this sector. The sector is capable of lifting the greatest number of people above the poverty level. While efforts are being made to address the credit bottlenecks are very commendable, there is the need for complementary reforms to provide the other critical elements. These include improving power, transportation, water, and all other ancillary issues which account for under-performance in the sector. As part of the suggestions for further research, there is need for more research into other variables that could equally determine output that were not captured in the study. It is important to consider further studies on the effects of banking sector growth on SMEs in Nigeria and other possible factors that impede or accelerate growth of the sector.

5.3 Recommendations

1. Monetary Authorities should endeavour to remove bottlenecks involved in the process of granting banking credit facility to SME's as this would encourage easy accessibility of loans and other incentives that will improve SME financing and subsequently, economic growth.
2. The Federal Government's fiscal and monetary authorities should improve in its management of macro-economic variables, such as the exchange and inflation rates; this will help maintain the value of the currency such that funds could be valuable enough to improve SME investments that will yield positive returns in the country.
3. SME's should be encouraged to building stronger internal structural base such that funds will be adequate to enable them function more effectively and compete favourably.
4. Deposit Money Banks should provide more training to help the SME's in financial management practices as this will enhance the accounting processes of SME's for improved accountability, transparency and effective management for better performance.
5. The federal government should come up with more institutionalize laws that will ensure adequate protection of SME's from any form of exploitation in a bid to access funds or ensure expansion and growth of their businesses.

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Appendix I: Results of Error Correction Model 1

	ECM Over parameterized	ECM Parsimonious
C	1.326927 (2.234121) [0.1551]	0.966816 (1.921266) [0.1271]
D(INFL)	-0.11377 (-2.86258) [0.1034]	-0.09433 (-2.44348) [0.0709]
D(INFL(-1))	0.089773 (3.258118) [0.0827]	0.07649 (3.09) [0.0366]
D(EXRT)	-0.11235 (-3.39251) [0.077]	-0.09147 (-2.96572) [0.0413]
D(EXRT(-1))	-0.04099 (-2.33769) [0.1444]	-0.03999 (-2.21754) [0.0909]
D(TRADB(-1))	2.813077 (3.248351) [0.0831]	2.261127 (2.858897) [0.046]
D(DEFB)	16.20031 (2.960941) [0.0976]	14.81909 (2.67817) [0.0553]
D(DEFB (-1))	-22.4501 (-3.51723) [0.0722]	-17.1345 (-3.25061) [0.0314]
D(CSMES)	4.00E-05 (1.803675) [0.2131]	2.80E-05 (2.109268) [0.1026]
D(CSMES (-1))	2.22E-05 (1.559757) [0.2592]	2.87E-05 (4.010025) [0.0021]
ECM(-1)	-0.93389 -1.69377 0.2324	-0.56083 -1.22413 0.2881
R-squared	0.938716	0.870095
Adjusted R-squared	0.509725	0.480379
F-statistic	2.188196(0.35)	2.232639(0.22)
D.W Statistic	3.166792	2.088905
N	17	17

Source: Author's Computation (2015)