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# Commercial Banks' Credit and the Growth of Small and Medium Scale Enterprises: the Nigerian Experience.

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***Abstract:****In recent times, small and medium scale enterprises (SMEs) have assumed the centre stage in the industrial development agenda of Nigeria. But to a large extent the existence and survival of these SMEs depend on adequate financing. The paper therefore examined the role played by commercial banks' credit in facilitating the growth of SMEs in Nigeria. It adopted co-integration and error correction mechanisms in carrying out this empirical examination. The findings revealed that Commercial Banks' credit has not contributed significantly to the growth of Small and Medium Scale Enterprises in Nigeria. To support the growth of SMEs by Commercial Banks, so that they can be properly positioned to play a catalytic role in rapid industrial take off and development in Nigeria, the paper recommended as follows: SMEs should be made to have easy access to credits by commercial banks, to achieve this, the monetary authority should ensure that the lending rate at which commercial banks lend to the SMEs is reduced to the barest minimum; devaluation of the national currency – the naira, should not be encouraged as devaluation makes imported raw materials and capital goods used by the SMEs very expensive and hence impedes their production rather, local sourcing of raw materials should be encouraged to reduce the pressure on exchange rate; and finally, more Commercial Bank branches should be established in Nigeria, especially in the rural areas to create opportunity for SMEs operating in such areas to have access to credits and finance their operations.*

***Keywords:****Commercial Banks, Credit, Growth, Lending Rate, and SMEs.*
***Jel classification Codes:****G20, G21, L25, L26 and O16.*

## I. Introduction

The role of small and medium scale enterprises in driving economic growth in nations, the world over, is well documented. Empirical evidences suggest that the foundation of the prosperity of the industrialized nations of the world was laid by small and medium scale enterprises. For example, the industrial revolution in Britain in the 19th century did not start with large scale industries, but with inventions in small scale industries that boosted productivity in the textile industry. Again, the fashion industry in Italy was founded on its cottage industries and China which is regarded today as the "workshop of the world" is anchored on low-tech manufacturing activities. With small and medium scale enterprises, these nations were able to tackle the problem of unemployment, reduce poverty, increase productivity and achieve overall economic prosperity.In recognition of the role of small and medium scale enterprises in the economic development process of nations, there has been a shift of emphasis by successive governments in Nigeria away from large scale capital intensive industrialization in favour of small and medium scale enterprises (SMEs), especially beginning from the 1980s.The growth and development of SMEs is therefore seen as a cardinal and veritable tool in the industrialization process of Nigeria. But the existence and survival of these small and medium scale enterprises to a large extent depend on adequate financing. As has been observed by Ovat (2013) and Afolabi (2013), the bane of SMEs in Nigeria is financial constraint.

One of the major sources of funds for the survival of the SMEs to perform their expected role of rapid industrialization and economic growth is commercial banks' credit. Commercial banks through their financial intermediation role, are expected to provide financial leverage for small and medium scale enterprises. But in most developing countries in Sub-Sahara Africa including Nigeria, small and medium scale enterprises are plagued with paucity of capital, thus affecting their ability to grow (World Bank 2013).Given the fact that SMEs have been generally acknowledged as the bedrock of industrial development of nations across the globe and financial institutions especially Commercial Banks are theoretically expected to provide financial succor for their growth, the objective of this paper therefore is to examine how well the Commercial Banks in Nigeria have extended credit to the small and medium scale enterprises to facilitate their growth. For purposes of clarity and analytical sequencing, the paper is organized as follows: Section 2 explores related literature and theoretical frame work, Section 3 presents the research methodology and in Section 4, empirical results are presented and analyzed while Section 5 concludes the paper with recommendations.

## II. Literature Review And Theoretical Framework

The significant role played by small and medium scale enterprises in the economic growth process of nations, has aroused the interest of researchers in this area of study. Consequently, there exists vast literature on the subject matter. Conceptually, there is no generally established definition of small and medium scale enterprises (SMEs). These enterprises can be variously defined depending on the state of development of the country. As noted by Musa (2013), the criteria for classifying an enterprise as small, medium or large varies from country to country and depending on the level of development of the country. For example, a small business to one country may be a large business to another. In Nigeria the national council on industry in 2001 defined small-scale enterprise as an industry with a labour size of 11 to 100 workers or a total cost of not more than ₦50 Million, including working capital but excluding cost of land. In like manner, medium scale enterprise is defined as an industry with a labour size of between 101 to 300 workers or total cost of over ₦50 million but not more than ₦200 Million, including working capital but excluding cost of land.Again, small and medium Industries Equity Investment Scheme (SMIEIS) defined SMEs as 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.

Aside the conceptual issue, the impact of Commercial Banks' credit on the growth of small and medium scale enterprises has been emphasized by researchers. For example, Oke and Aluko (2015) examined the impact of Commercial Banks in financing small and medium scale enterprises (SMEs) in Nigeria for the period 2002 to 2012. The authors collected annual data from ten Commercial Banks and adopted panel data regression analysis. The results indicate that Commercial Banks have significant impact on SMEs' financing which implies that Commercial banks are capable of making SMEs grow.In a related study, Imoughele and Ismaila (2014) investigated empirically the impact of Commercial Banks' credit on small and medium scale enterprises in Nigeria between 1986 and 2012, using co-integration and error correction modeling technique. The findings revealed that SMEs and selected macroeconomic variables included in the model are co-integrated indicating a long run relationship between them. The findings further revealed that savings, time deposit and exchange rate have significant impact on SMEs' output in Nigeria, while interest rate has adverse effect. The paper therefore recommended among others that interest rate on credit facility granted to SMEs should be drastically reduced and soft loans devoid of stringent conditions be granted to the SMEs.Again Iloh and Chioke (2015) examined the relationship between Commercial Bank credits indicators and availability of credit facility to small and medium scale enterprises in Nigeria. Using data extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin for the period, 1980-2010 and adopting the generalized least squares estimation technique, the results showed that Commercial Banks' credits to SMEs have significant effect on Nigeria's economic growth by positively affecting gross domestic product. This implies that SMEs' financing is a great catalyst and driving force for economic growth. The paper recommended that soft and short term loans should be made available to SMEs for further growth.

Furthermore, Dada (2014) maintained that access to credit is crucial for the growth and survival of small and medium scale enterprises (SMEs)utilizing data from 1992 to2011 and adopting ordinary least squares regression, the study revealed that Commercial Banks' credit to SMEs and saving and time deposit of commercial banks exert a positive influence on SMEs' development while exchange rate and interest rate have adverse effects on SMEs' development. Dada (2014) therefore recommended that Commercial Banks should lend more to the SMEs at subsidized rate.Owenvbiugie andIgbinedion (2015) analyzed the role of finance in the growth of small and medium scale enterprises in Edo State, Nigeria. The study adopted a survey research design and a sample of 122 respondents was used. Cronbach Alpha was used to compute the reliability of the instrument and yielded 0.89. The findings showed that SMEs growth was hindered as a result of inability to access funds from financial institutions as a result of stringent policies required by banks and other financial institutions. Consequently, the authors recommended that necessary financial assistance should be given to the sector by government and other stake holders in order to accelerate the growth of SMEs in the rural communities to reduce the current unemployment and rural- urban migration.Funding has remained a major challenge to the growth of small and medium scale enterprises in Nigeria. This assertion was buttressed by (Abereijo and Fayomi, 2005. Beck, 2007 and Ovat, 2013). Again World Bank (2001) reported that 39 per cent of small scale enterprises and 37 per cent of medium scale firms in Nigeria are financially constrained. Arising from the issue of financial constraints to the growth of SMEs, some studies have documented that commercial banks have risen to the challenge in providing financial succor to the SMEs to support their growth in Nigeria. For example,Nwosa and Oseni (2013) examined the impact of bank loans on manufacturing output in Nigeria between 1992 and 2010. Utilizing error correction modeling technique, the findings indicated that banks' credit to the SMEs had significant impact on manufacturing output both in the short run and long run.On the other hand, a number of studies have shown that commercial banks' role in extending credit to the SMEs in Nigeria is not impressive. For example, Central Bank of Nigeria (2010) revealed that Commercial Banks' advances to SMEs have been on the decline over the years. This is corroborated by Luper (2012), when he documented that

Commercial Banks loans to SMEs as a percentage of total credits, decreased from 48.79 per cent in 1992 to 0.15 per cent in 2010. Other studies that share this view that Commercial Banks have not played a substantial role in small and medium business lending are (Pranti, Almus, Egelu and Engel 2006, Obamuyi, 2007, Bonaccorsi and Gobbi, 2007). Still on the declining role of commercial banks in funding SMEs in recent times in Nigeria, Aliyu and Bello (2013) examined the contribution of commercial banks to the growth of small and medium scale enterprises. The study adopted descriptive method of analysis using ratio and trend analyses. It was discovered that Commercial Banks contribute in financing SMEs but their contribution has declined as government via the Central Bank of Nigeria (CBN) directed that mandatory banks' credit allocation be abolished.

The impact of 2004 banking reforms on the financing of SMEs in Nigeria was examined by Mamman and Aminu (2013). The study used a randomly chosen sample size of 500 respondents and employed Chi square test. The results revealed that there is no significant impact of 2004 banking reform on the financing of SMEs in Nigeria and suggested that there are some constraints that militate against access to credit from Commercial Banks by SMEs.In a related study, Omah, Duruwoju, Adeoye and Elegunde (2012) investigated the impact of post-bank consolidation on the performance of small and medium scale enterprises in Nigeria, using Lagos state as a case study. Omahetal (2012) drew a sample size of 50 from the supra-population of the study within Ikeja local Government area of the State and adopted mean, standard deviation and coefficient of variation in their data analysis. The findings showed that small and medium scale enterprises do not have access to finance through banks, due to neo-reorganization in banks as a result of post-bank consolidation and SMEs do not have perfect rapport with financial institutions as a result of their financial background in Nigeria.From the foregoing empirical literature, results are mixed on the role of Commercial banks' financing of SMEs in Nigeria. While some studies maintained and affirmed that Commercial Banks have contributed immensely to the growth of SMEs, others debunked such claims and opined that no substantial contribution has been made by Commercial Banks towards the growth of SMEs in Nigeria. This suggests that there is no consensus among researchers on the role of Commercial banks in the growth of SMEs in Nigeria. The debate rages on. This paper is therefore one of the several attempts to contribute to the on-going debate.

Theoretically, the finance led growth hypothesis provides a veritable framework and a lucid explanation for the link between banks' credit and the growth of the SMEs. This theory, which was propounded by Schumpeter in 1912, maintains that the activities of the financial institution serve as a useful tool for increasing the productive capacity of the economy. In concrete term, the finance led growth hypothesis emphasizes that the existence of financial institution and the supply of their financial assets, liabilities and related financial services in advance of demand for them would provide an efficient allocation of resources from surplus spending units to deficit units, thus boosting investment which in turn stimulate growth. A number of studies have argued in favour of the finance led growth hypothesis. They include: (Patrick 1966, McKinnon 1973, Shaw 1973, King and Levine 1993). These studies acknowledge the role played by banks in facilitating technological innovation by identifying and supplying credit to entrepreneurs with the least chances of implementing innovative products.Another theory that provides a useful explanation on the relationship between banks' credit and the growth of SMEs is the bank capital channel theory of monetary policy. According to this theory, monetary policy affects the supply of intermediated credit, particularly bank loans and is active through an imperfect market for bank debt. Given the different transmission mechanisms through which monetary policy affects economic activities, an expansionary monetary policy will increase money supply which will in turn increase Commercial Banks' reserve and their ability to create credit to investors including SMEs at reduced interest rates.

On the other hand, a restrictive or contractionary monetary policy leads to a reduction of Commercial Banks' reserves which inhibits their ability to lend to the business public.Under a restrictive monetary policy regime the interest rate at which Commercial Banks borrow from the Central Bank is high and in like manner, the rate at which they lend to the business public is high. This model considers the lending behaviours of banks to SMEs to be influenced by capital adequacy requirement with interest rate as a major determinant. This theory is linked to many scholars (example, Bernanke and Gertler1995, Kishan and Opiele, 2000, Van den Heuvel, 2003 and Obamuyi, 2007). The dictates of monetary policy as purported by this theory in no small measure affect the relationship between Commercial Banks and small and medium scale enterprise in Nigeria.

## III. Research Methodology

The paper adopts an econometric approach in its empirical analysis of the role of commercial Banks on the growth of small and medium scale enterprises in Nigeria. The technique of analysis is co-integration and error correction modeling. This technique is chosen in order to determine whether there is the existence of a long run equilibrium relationship in the series. The basic idea behind co-integration is that if in the long run two or more series move closely together even though the series themselves are trended, the difference between them is constant. It is possible to regard these series as defining a long run equilibrium relationship as the difference between them is stationary (Hall and Henry, 1989).

Having established that the variables in the model are co-integrated it becomes possible to differentiate the short run dynamics from the long run relationship (Ang and Mcikibbin, 2007). In order to indicate the speed of adjustment from the short run equilibrium to the long run equilibrium, the study employs the vector error correction model technique. The greater the coefficient of the error correction term, the higher the speed of adjustment of the model from the short run to the long run and vice versa.

**3.1 The Model:**

The theoretical base of the model is eclectic, anchored on the Schumpeterian finance led growth hypothesis and the bank capital channel theory of monetary policy. The Schumpeterian finance led growth hypothesis emphasized the supply of financial assets, liabilities and related financial services by financial institutions in advance of demand for them by enterprises. In this way, the financial sector leads other sectors of the economy in their growth process and boosts the productive capacity of the economy. The bank capital channel theory stressed that interest rate is a key factor affecting banks' lending behavior and banks' capital adequacy. The model is specified as follows:

**SMEQ = F (CBCR, LNDR, INFL, EXCHR, BD)……..(1)**

Equation (1) is transformed into an econometric form to include the error term as follows:

$$\mathbf{SMEQ = \alpha_o + \alpha_1 CBCR + \alpha_2 LNDR + \alpha_3 INFL + \alpha_4 EXCHR + \alpha_5 BD + U_t \ldots\ldots\ldots\ldots\ldots (2)}$$

Where:

SMEQ = Small and medium scale enterprises' (SMEs) output. (Wholesale and retail trade output as a component of Gross Domestic Product is used as a proxy forSMEQ).

CBRC = Commercial Banks' credit

LNDR = LENDING, Rate

INFL = Inflation rate

EXCHR = Exchange Rate

BD = Bank Density.(Total number of Commercial Banks branches is used as proxy for BD).

$U_t$ = Stochastic error term

$\alpha_o$ = Constant term

$\alpha_1$ -$\alpha_5$ = Coefficients of the explanatory variables

***3.2 Sources of Data:***

The data used in this paper are annual time series secondary data sourced from the Central Bank of Nigeria statistical bulletin, various issues and National Bureau of statistics (NBS) various issues.

## IV. Empirical Results and Analysis.

**4.1 Unit Root Test:**

To ensure that the data for the variables used in the model do not fluctuate unnecessarily, unit root test is conducted to ascertain the stationary status of the variables, using Augmented Dickey – Fuller (ADF) technique. Running regression with non stationary data series produces spurious results that may not be reliable. From the unit root result, only the dependent variable, small and medium scale enterprises' output (SMEQ) is found to be stationaryat level while the rest of the explanatory variables are stationary at their first difference. The unit root ADF test result is presented in table 1.

**Table1:** ADF Unit Root Test Result

| | Coefficients | | Critical value at 5% | | |
|---|---|---|---|---|---|
| **Variable** | **Level** | **1st Diff** | **Level** | **1st Diff** | **Decision** |
| SMEQ | -7.461454 | - | -2.981038 | - | I (0) |
| D(CBCR) | -1.801862 | -6.912218 | -2.954021 | -2.957110 | I (1) |
| LNDR | -2.600769 | -6.410010 | -2.954021 | -2.960411 | I (1) |
| D(LN(BD)) | -0.388329 | -3.932634 | -2.954021 | -2.957110 | I (1) |
| EXCHR | -0.066327 | -5.817239 | -2.954021 | -2.957110 | I (1) |
| INFL | -2.594509 | -5.817239 | -2.954021 | -2.960411 | I (1) |

Source: Computed by the author.

Note: (i) D before the bracket represents first difference operator

(ii) LN = Logarithm

Having conducted the unit root test, the paper proceeds to test for the existence or other wise of long run relationship between small and medium scale enterprises' output and other explanatory variables, using Johansen co-integration test. The result of the co-integration test is presented in table 2a and 2b:

**Table 2a:** Johansen Co-Integration Test Results of Series Smeq, Bd, Cbcr, Exchr, InflandLndr. Unrestricted Co-Integration Rank Test (Trace)

| Hypothesized No. of CE(s) | Eigen value | Trace Statistic | 0.05 Critical Value | Prob.* * |
|---|---|---|---|---|
| None* | 0.780931 | 135.0715 | 95.75366 | 0.0000 |
| At most 1* | 0.754150 | 86.48363 | 69.81889 | 0.0013 |
| At most 2 | 0.512435 | 41.58658 | 47.85613 | 0.1706 |
| At most 3 | 0.320746 | 18.59995 | 29.79707 | 0.5319 |
| At most 4 | 0.176708 | 6.223618 | 15.49471 | 0.6691 |
| At most 5 | 4.39E-05 | 0.001406 | 3.841466 | 0.9687 |

Trace test indicates 2 co-integrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
** Mackinnon – Haug – Michelis (1999) P-values

**Table 2b:**Unrestricted Co-Integration Rank Test (Max. Eigen Value)

| Hypothesized No. of CE(s) | Eigen Value | Max. Eigen Statistic | 0.05 Critical value | Prob.* * |
|---|---|---|---|---|
| None* | 0.780931 | 48.58786 | 40.07757 | 0.0044 |
| At most 1* | 0.754150 | 44.89705 | 33.87687 | 0.0017 |
| At most 2 | 0.512435 | 22.98663 | 27.58434 | 0.1740 |
| At most 3 | 0.320746 | 12.37634 | 21.13162 | 0.5110 |
| At most 4 | 0.176708 | 6.222212 | 14.26460 | 0.5849 |
| At most 5 | 4.39E-05 | 0.001406 | 3.841466 | 0.9687 |

Max. Eigen value test indicates 2 co-integratingeqn(s) at the0.05 level
* denotes rejection of the hypothesis at the 0.05 level
** Mackinnon-Haug-Michelis (1999) P- value
Source: computed by the author.

The Johansen co-integration test results presented in tables 2a and 2b revealed that there is a long run relationship between small and medium scale enterprises' output (SMEQ) and the independent or explanatory variables captured in the model, as both the trace statistic and Maximum Eigen value indicate two co-integrating equations each at the 5 per cent level.Since it has been established that a long run relationship exists among the variables in the model, an economic interpretation of the long run small and medium scale enterprises' output can be obtained by normalizing the estimates of the unconstrained co-integrating vector on the small and medium scale enterprises' output. Out of the two co-integrating equations, only one was chosen based on statistical significance and conformity of the coefficients with economic theory. As shown by the preferred co-integrating equation, almost all the explanatory variables are significant in influencing changes in small and medium scale enterprises' output (SMEQ), except commercial banks' credits. The matrix of the beta coefficients and the preferred co-integrating equation of the model from the Johansen co-integration analysis are presented in table 3 in the appendix.

Having ascertained that the variables are co-integrated, the stage is set to formulate an error correction model. The essence of the error correction model is to recover the long-run information lost in the course of differencing the variables. This is done with the introduction of the error correction term, derived from the long-run equation based on economic theory. Essentially, the error correction term is an innovation that measures the speed of adjustment of small and medium scale enterprises' output (SMEQ) to its long-run equilibrium. It shows the proportion of disequilibrium errors accumulated in the previous period which are corrected in the current period.Next, the over parameterizederror correction model is estimated to identify the main dynamic patterns in the model and ensure that the dynamics of the model are not constrained. However estimates of the over parameterized model are not usually analyzed due to the difficulty in determining the optimal lag for the variables on the right hand side of the model. The overparameterized model merely provides a plat form for the elimination of all statistically insignificant lags using Hendry's (1986) methodology of "general to specific". With this methodology, a more preferred parsimonious model is derived from the overparameterized error correction model.Estimates of the overparameterized model are presented in table 4 in the appendix. The parsimonious model results are presented in table 5. The results in table 5 revealed that the estimated coefficient of the error correction term has the correct sign and is statistically significant at 5 per cent level. The results further showed that the speed of adjustment of small and medium scale enterprises' output to the long-run equilibrium path is slow, as about 21.3 percent of the disequilibrium errors which occurred in the previous period are corrected in the current period.Again from table 5, while commercial banks' credit to SMEs has the correct sign in line with theoretical apriori expectation, it is not statistically significant. This implies that it does not significantly influence changes in small and medium scale enterprises' output in Nigeria. This

finding is in line with the findings ofImoughele and Ismaila (2014) who maintained that commercial banks credit has not contributed significantly to the growth of SMEs in Nigeria. Furthermore, exchange rate (EXCHR) from apriori expectation can either be positive or negative. From the empirical results, exchange rate is found to be statistically significant both in the short run and in the long run. Its current value and its one year lagged value turned out with a positive sign implying that continuous depreciation of the naira makes imported goods to be expensive and unattractive thereby reducing foreign competition and boosting local production of the small and medium scale enterprises. However the two years lagged value of exchange rate turned out with a negative sign. This means that as an import dependent country, the depreciation of the Nigeria naira, makes imported raw materials and capital goods used by SMEs in Nigeria to be dearer and hence reduces their output.The statistical significance of exchange rate indicates that it is a critical variable in influencing small and medium scale enterprises' output in Nigeria.

Moreover, the empirical results also showed that lending rate with a negative sign, conforms to apriori expectation but is not statistically significant. A one per cent increase in lending rate for instance, will lead to 0.98739 decrease in small and medium scale enterprises' output. As revealed by the results the one year lagged value of lending rate does not significantly influence changes in SMEs' output in Nigeria. This may perhaps be due to the high lending rate at which commercial banks lend to the SMEs sub-sector. This finding is in conformity with the findings of Afolabi (2013) who documented that lending rate of commercial banks to the SMEs exerts negative influence on their growth.Next, the empirical results revealed that the estimated coefficients of the current value, one year lagged value and two years lagged value of inflation rate conform to theoretical apriori expectations. While the current and one year lagged values are not statistically significant, the two years lagged value of inflation rate is statistically significant at 10 per cent level.Bank density, from the empirical results, is found to be consistent with apriori expectation. However, it is not statistically significant. This finding is also in tune with the findings of Imoughele and Ismaila (2014) who noted that bank density does not significantly influenced SMEs' output in Nigeria.The results further revealed that the adjusted $R^2$ the coefficient of determination explains about 73.8 per cent of total variation in SMEs' output. This shows that the model has a good fit. The F-statistic further revealed that the overall model is statistically significant as F-calculated of 24.94867 is greater than F-tabulated of 2.69 at the 5 per cent level of significance.Finally, the Durbin-Watson statistic which tests for the existence or otherwise of autocorrelation, indicates that there is no autocorrelation as the calculated value of 1.899459 falls within the "no auto-correlation region". To this end, the findings of this study can be used for policy formulation.

**Table 5:** Parsimonious Result

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.258845 | 0.121431 | 2.131627 | 0.3632 |
| D(LOG(CBCR(-1))) | 0.071855 | 0.063465 | 1.132285 | 0.0449 |
| EXCHR | 0.236322 | 0.097092 | 2.434003* | 0.0250 |
| EXCHR(-1) | -0.266487 | 0.097519 | -2.732667* | 0.1931 |
| EXCHR(-2) | 0.256898 | 0.094926 | 2.706308* | 0.0140 |
| INFL | 0.015125 | 0.004227 | -3.578267* | 0.0020 |
| INFL(-1) | -0.378678 | 0.080339 | -4.713508* | 0.0002 |
| INFL(-2) | -0.124789 | 0.069545 | -1.794375** | 0.1274 |
| LNDR(-1) | -0.197878 | 0.162949 | -1.214355 | 0.0001 |
| D(LOG(BD)) | 0.036293 | 0.025841 | 1.404474 | 0.3341 |
| D(LOG(BD(-1))) | 0.102127 | 0.090366 | 1.130157 | 0.2725 |
| ECM(-1) | -0.212545 | 0.099090 | -2.144970* | 0.1388 |

| | | | |
|---|---|---|---|
| R-squared | 0.785250 | Mean dependent var | 12.01487 |
| Adjusted R-squared | 0.737763 | S.D. dependent var | 10.73773 |
| S.E. of regression | 5.556328 | Akaike info criterion | 29.57825 |
| Sum squared resid | 5.870712 | Schwarz criterion | 30.13334 |
| Log likelihood | -44.64628 | Hannan-Quinn criter | 29.75919 |
| F-statistic | 24.94867 | Durbin-Watson stat | 1.899459 |
| Prob.(F-statistic) | 0.000000 | | |

*Significant at 5 per cent level of significance
**Significant at 10 per cent level of significance
Source: Author's computation.

## V. Conclusion

The growth of small and medium scale enterprises (SMEs) has been in the front burner in Nigeria in recent times. This is due largely to the fact that from empirical evidence, SMEs constitute the bedrock of every nation's industrial take-off. Existing studies in the literature have identified financial constraint as a major

impediment to the growth of SMEs in developing countries. It is in this respect that this paper re-examined the impact of Commercial Banks' Credit on the growth of small and medium scale enterprises in Nigeria. Based on the empirical findings, Commercial Banks' Credit has not contributed significantly to the growth of small and medium scale enterprises in Nigeria. For SMEs to play a catalytic role in rapid industrial take-off and development in Nigeria, the paper makes the following recommendations:

(i) SMEs should be made to have easy access to funds by the Commercial Banks since access to funds can make or mar their existence and growth. Adequate funding of SMEs by Commercial Banks in Nigeria, will galvanize their growth and create a soft landing for them to perform the all-important role of reduction in unemployment, poverty, and increase in productivity and achievement of overall economic prosperity. SMEs should be encouraged and nurtured and not to be looked at as too risky ventures by commercial Banks.

(ii) To have access to credit facilities, interest rate is cardinal. The monetary authority in Nigeria should therefore reduce the lending rate at which Commercial Banks lend to the SMEs. If this is done, borrowing from the Commercial Banks will be attractive and they will have access to credit facilities to finance their operations.

(iii) For a country like Nigeria that is less productive but heavily import dependent, the value of its national currency should be jealously guarded, as exchange rate plays a significant role in its relationship with the rest of the world. Naira devaluation should not be encouraged since most of these SMEs depend on imported raw materials and capital goods for production. Devaluation of the currency which is theoretically expected to boost exports is only beneficial to a country that is very productive. In Nigeria local sourcing of raw materials should be encouraged for SMEs to reduce the pressure on exchange rate.

(iv) From the empirical results, Bank density was found to be statistically insignificant in influencing small and medium scale enterprises' output in Nigeria. To this end, more Commercial Banks branches should be established in Nigeria, especially in the rural areas so that SMEs can have easy access to credit facilities to facilitate their growth.

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**Appendix:**

**Table 3:**Unrestricted Cointegrating Coefficients (Normalized by b`*S11*b =I):(PT-Matrix of Beta Coefficient from the Johansen Cointegration Analysis)

| SMEQ | BD | CBCR | EXCHR | INFLR | LNDR |
|---|---|---|---|---|---|
| 5.02E-07 | -0.001697 | 6.85E-06 | -0.028747 | -0.023634 | 0.120962 |
| 4.35E-07 | -0.001113 | -1.22E-05 | 0.030964 | 0.084591 | -0.055865 |
| -6.12E-07 | -0.000866 | -8.05E-05 | 0.054897 | -0.014539 | 0.160669 |
| 1.75E-06 | -0.001636 | 4.55E-05 | -0.020081 | 0.005982 | 0.218596 |
| 1.21E-06 | -0.001754 | 4.02E-05 | 0.010714 | 0.000251 | -0.034971 |
| -3.21E-06 | 0.002656 | -1.97E-05 | 0.012007 | -0.019485 | -0.084282 |

Normalized cointegrating coefficients (standard error in parantheses)

| SMEQ | BD | CBCR | EXCHR | INFLR | LNDR |
|---|---|---|---|---|---|
| 1.000000 | 0.000000 | -157.4775 | 470763.5 | 945809.4 | -1277601. |
| (92.9857) | (78082.5) | (112393.) | (317703.) | | |

**Source**: Computed by the Author.

**Table 4:** Over Parameterized Result

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.011794 | 0.006983 | 1.689038 | 0.1150 |
| D(LOG(CBCR)) | -0.864712 | 0.808230 | -1.069883 | 0.3041 |
| D(LOG(CBCR(-1))) | 0.075851 | 0.049094 | 1.745018 | 0.5950 |
| D(LOG(CBCR(-2))) | 0.003909 | 0.025479 | 0.153436 | 0.8804 |
| EXCHR | 1.316464 | 0.672030 | 1.958937 | 0.0551 |
| EXCHR(-1) | -0.499339 | 0.274523 | -1.818936 | 0.0548 |
| EXCHR(-2) | 0.148270 | 0.082738 | 1.792047 | 0.1354 |
| INFL | -0.398833 | 0.223704 | -1.782862 | 0.1162 |
| INFL(-1) | -0.236505 | 0.076427 | -3.094516 | 0.0085 |
| INFL(-2) | -0.355790 | 0.200582 | -1.773792 | 0.1395 |
| LNDR | 0.019295 | 0.035399 | 0.545077 | 0.5949 |
| LNDR(-1) | 0.211654 | 0.079225 | 2.671558 | 0.0192 |
| LNDR(-2) | 0.149296 | 0.177677 | 1.209665 | 0.2479 |
| D(LOG(BD)) | 0.129946 | 0.072139 | 1.801336 | 0,0907 |
| D(LOG(BD(-1))) | 0.412381 | 0.239621 | 1.720972 | 0.0454 |
| D(LOG(BD(-2))) | 0.001559 | 0.003785 | 0.411905 | 0.6871 |
| ECM(-1) | -0.238011 | 0.080206 | -2.967498 | 0.0510 |

| | | | |
|---|---|---|---|
| R-squared | 0.862752 | Mean dependent var | 12.25514 |
| Adjusted R-squared | 0.846909 | S. D. dependent var | 17.52664 |
| S. E. of regression | 5.052136 | Akaike info criterion | 29.40044 |
| Sum squared resid | 3.320912 | Schwarz criterion | 30.19445 |
| Log likelihood | -4.240065 | Hannan-Quinn criter. | 29.65445 |
| F-statistic | 21.00100 | Durbin-Watson stat. | 1.739498 |
| Prob. (F-statistic) | 0.000001 | | |

**Source:** Computed by the Author.