

IMPACT OF SMALL AND MEDIUM-SIZED ENTERPRISE ON THE GROWTH OF THE NIGERIAN ECONOMY

A CO-INTEGRATION APPROACH

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Abstract

The studies study investigated the impact of Small and Medium-sized Enterprises (SMEs) on the growth of the Nigerian economy for the period of 1986-2014. The study which is an ex-post-facto research employed data generated from Central Bank of Nigeria (CBN) statistical bulletin and Ordinary Least Square (OLS) method of estimation were employed in the data analysis. The result of the Augmented Dickey Fuller (ADF) test shows that all the variables are integrated of the same order one $I(1)$. The result of the Johansen co-integration test indicates that there is a long run relationship between SMEs, Oil revenue (OILR), Inflation (INFRT) and economic growth in Nigeria. The result of the short run dynamic model as shown by the coefficient of Error Correction Model (ECM) reveals that the speed of adjustment from short run disequilibrium to long run equilibrium is about 42.83%. The result of the OLS multiple regression analysis showed that SME, OILR, INFRT has a positive and significant impact on the growth of the Nigerian economy in the short run, while in the long run the result showed that SMEs has a positive but insignificant impact on the growth of the Nigerian economy. The study therefore suggested that polices that will increase the budgetary allocation to the sector should be adopted by the

government as well as the introduction of a similar credit guarantee scheme like what is obtainable in the agricultural sector. Banks should also increase concessional (low interest rate) credit grant to this sector of the economy as they has the capacity to stimulate and drive the economy in the long run.

Keywords: Small and Medium Enterprise, Error Correction Model, Oil Revenue, Inflation, Economic growth, Co-integration

INTRODUCTION

Small and medium-sized enterprises, also known as small and medium scale enterprises (SMEs), have been widely recognized as the engine of sustainable economic growth and development. This critical sub-sector does not only outnumber large corporations by a very wide margin, but also employ greater number of people. As a result, economic successes of many countries are traced to vibrant small and medium-sized businesses. The development of Small Scale Enterprises (SMEs) in Nigeria is an essential element in the growth strategy. SMEs not only contribute extensively to improved living standards, they also bring considerable local capital formation and attain high level of productivity (Okufolami, 2003). Among the secret of economic prosperity are innovation and competition, which is driven by the growth and survival of small businesses. For this reason, governments have designed policies and introduced incentives all of which are geared towards creating enabling environment for small and medium scale enterprises. SME in any country is very crucial for the creation of jobs, foreign exchange earnings, poverty reduction, wealth creation, equitable distribution of income and bridging the inequality gap.

Olorunshola (2003) maintained that the definitions SME change over a period of time and depend, to a great extent, on a country's level of development. Even though the definitions of SMEs differ among countries, there is a consensus that it has higher contribution to GDP than large companies. Arguably, knowledge is the mother of innovation. In consonance with this deduction, researchers have observed that knowledge is critical in reinforcing SMEs, therefore the more knowledgeable the labour force, the greater the innovativeness, thus higher growth of SMEs, which will translate into rapid economic growth and development. Nevertheless, in the nucleus of these growths and success appears the essentialness of credit or finances. In past years, it was acknowledged that the major setback in Nigeria's industrial development process was the lack of long-term finance for Small and medium Scale enterprises. Granted, the Federal Government has over the years introduced monetary, fiscal and industrial policy measures to ensure the growth and survival of the SME sub-sector.

The rapid growth of both the informal sector, like agricultural production, and industrial production has actually increased the demand for bank credit by these sectors. In Nigeria, the role of credit in promoting small and medium scale enterprises has been overwhelming. The government of Nigeria and the monetary authority has recognized that for there to be a sustainable economic growth and development, the chunk of the population must be financially empowered in order to advance their entrepreneurial pursuits. Most small and medium enterprises in Nigeria finance their businesses through personal savings and income, borrowings from friends and relatives, thrift societies, cooperatives societies etc. However, deposit money banks in Nigeria are the main financiers of small and medium-sized businesses. The need for improved way of doing things has given rise to the need for technology, research and surveys, supply chain development, and even trade credits. All of these call for adequate capital, which may not be funded personally or through the informal financial units. Thus, for SMEs to thrive, bank credit has become quite indispensable.

Purpose of Study

The objective of this study is to examine the impact of small and medium scale enterprise on the growth of the Nigerian economy as well as determine the existence of a long run relationship between the variables under study.

LITERATURE REVIEW

The contributions of the small and medium-sized enterprises (SMEs) in stimulating industrial and economic development are well documented in the literature. The experience many countries have had show that SMEs can significantly contribute to the attainment of many economic development objectives (Salami, 2003). SMEs are specifically relevant in employment generation, mobilization as well as utilization of local resources, export earnings, output expansion, reduction of income disparity, promotion of import substitution economy, promotion of even development, mitigating rural urban migration, stimulation of technological innovation, and transformation of indigenous technology, production of intermediate products for both forward and backward integration etc.

Against this backdrop, it becomes very important that the banking system come in to play their traditional role of financial intermediation – bridging the gap between the savers and the borrowers. Therefore, deposit money banks are veritable channel through which small and medium scale businesses can access the credits needed to fund their operations. Every now and then, governments make policies specifically for SMEs financing, but such policies are usually scrapped or redesigned by another regime. This factor of discontinuity in policy

implementation has remained a big challenge in financing SMEs through various channels and schemes meant to be closer, cheaper, simpler, more efficient and concessionary. As a result, bank credit has been found more reliable amid high cost of fund and stringent conditions.

Bank credits to the SMEs are basically in the form of loans and advances. The credits so granted are largely of a short-term nature. The reason for this can be traced to the riskiness of such credits given the presumption that such class of borrowers have high default rate. Instead, banks concentrate more in granting facilities to large companies and in financing of foreign trade. The growth of the economy brought about wider outlets for bank funds, which has naturally changed the pattern of bank lending. Particularly, the rapid expansion of industrial production has increased the demand for bank credit on the part of manufacturing firms. Commercial banks and merchant banks have continued to providing finances for industries, some of which are managed by indigenous entrepreneurs that grow rapidly in number. In fact, under the credit guidelines set by the Central Bank since 1964, the banks in the country have been encouraged to reallocate credit with preference to the productive sectors of the economy (Tawose, 2012).

Government's Support and Schemes for SME Financing

Nations of the world have come to acknowledged that SME remains the bedrock of the industrial growth and development. Besides the numerous specific benefits of SMEs, experience has revealed that, where the enabling environment exists, it has a way of charging the individuals and the government to be self-reliant. In addition, a mono-economy like Nigeria will begin to diversify. Because SMEs are mainly labour intensive, unemployment rate will decline and the overall welfare of the population will be improved, thus growth in GDP per capita. Aware of its enormous contributions, governments and International organizations take urgent steps towards achieving a sustainable industrial growth through the rapid growth and development of the small and medium-sized enterprises (Anyawu, 2003).

Due to a number of factors, the SMEs have had difficulties accessing institutionalized credit facilities;

- SMEs are often considered to be highly risky, vulnerable to external environments, and less likely to make repayments on loans.
- Most SMEs have none or inadequate collateral that banks require as one of the conditions for a facility to be granted.
- Banks are habitually preferred extending credit to blue chip corporate borrowers to small borrowers. The rationale is that such corporations make impressive profits and good returns and there will make repayments promptly.

- Most SMEs do not keep accounting and other financial records which banks normally peruse before advancing credit facility.

In view of these constraints, the Central Bank of Nigeria and the Nigerian government have shown serious commitment in fostering the growth and development of the small and medium scale businesses in Nigeria. Through its credit guidelines, the CBN required banks to allocate stipulated minimum of credit to the preferred sectors of the economy including the SME. This policy directive drew the attention of banks to a sub-sector hitherto neglected. Such informal sectors like agriculture, and manufacturing has been boosted with credits and other support services. Furthermore, the following incentives and channels were designed for SMEs financing;

Small and Medium Industries Equity Investment Scheme (SMIEIS)

SMIEIS was the idea of the Bankers' Committee. Under the scheme, all banks in Nigeria are required to set aside 10 per cent of their profit before tax annually for equity investments in small and medium scale industries. The Bankers' committee at its 246th meeting held on 21st December, 1999 approved the scheme.

Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB)

This was established in October 2000, principally to finance agricultural production and also the small and medium enterprises. The NACRDB accepts deposits and grant loans and advances in which the interest rates are charged according to the purpose for the loan. The bank equally renders a number of financial products and support services that facilitate sustainable growth of SMEs.

The Bank of Industry (BOI)

The Bank of Industry is an amalgamation of the then Nigerian Industrial Development Bank (NIDB), the Nigerian Bank for Commerce and Industry (NBCI) and the National Economic Reconstruction Fund (NERFUND). It was set up in the year 2000 with the primary objective of making credit available to the industrial sector, and the small and medium scale enterprises.

Refinancing and Rediscounting Facility

This was initiated by CBN in January 2000, with the aim of providing concessionary interest rate to support medium and long term lending by banks to the productive sectors of the economy. This facility was introduced to provide banks with liquidity to boost their financing of the productive sectors of the economy. This will ensure that real sectors can obtain long-term credit facilities from the deposit money banks.

EMPIRICAL REVIEW

Ogujiuba, Ohuche and Adenuga (2004) looked into credit availability to small and medium scale enterprises in Nigeria. theoretical and statistical comparative cross-sectional data was adopted to analyze the Small and medium industries equity investment scheme (SMIEIS) Programme of Nigeria in relation to capital base of banks in ascertaining whether adequate capital base offers an effective means of solving problem of funding SME in Nigeria. The paper showed that capital is vital for the response of bank lending to economic shocks and emphasize the need for a sound and efficient financial sector to support SME's. They went further to say that banks should adopt relationship lending as an overriding bank rule in funding SMEs.

Dada (2014) did an empirical review of commercial banks' credit and the development of SMEs in Nigeria between 1992 and 2011. The study employed secondary data while Ordinary Least Square technique was adopted to estimate the multiple regression models. The estimated model showed that commercial banks credit to SMEs exert a positive influence on SMEs development, which was proxied by wholesale and retail trade output as a component of GDP, while exchange rate and interest rate revealed negative effect on SMEs development. The study suggested among others that adequate savings should be mobilized from the public, and that government should persuade banks to lend to SMEs by providing guarantee, interest rate concessions and other incentives.

Imoughele and Ismaila (2013) investigated the impact of commercial bank credit accessibility on sectoral output growth in Nigeria, covering the period 1986 to 2011. An augmented growth model was estimated using the ordinary least square (OLS) techniques. The result of the study revealed that commercial bank credit has a long-run relationship with sectoral output growth in Nigeria. While appraising the growth effect of SMEs financing in Nigeria, Afolabi (2013) employed the OLS method in estimating the multiple regression model. The results indicated that SMEs output have positive influence on economic development while lending rate is found to exert negative effects on real GDP, a proxy for economic growth. As a result, the study suggested that the government should create an conducive environment for SME development in Nigeria.

A related study by Nwosa and Oseni (2013) sought to empirically ascertain the impact of bank advances to SMEs on manufacturing output in Nigeria between 1992 and 2010. The study adopted an error correction modeling (ECM) technique and found that banks advances to the SME sector had significant positive impact on manufacturing output both in the long-run and short-run. Based on this observation, the authors suggested that the government should ensure that SMEs have access to bank loans and advances since this will translate to rapid economic growth and output expansion.

Akingunola (2011), in his paper, explored the relationship between SMEs financing and economic growth in Nigeria. On that ground, he assessed financing options available to SMEs in Nigeria and the contribution to economic growth via investment level. The Spearman's Rho correlation test was adopted to find out the relationship between SMEs financing and investment level. A significant Rho value of 0.643 at 10% was reported at the end of the analysis. This indicated the existence of significant positive relationship between SMEs financing and economic growth in Nigeria by means of investment level. Descriptive statistics were also employed in the appraisal of certain financing indicators. The paper later proposed that accessibility to low interest rate finances should be provided to SMEs in order to enhance the growth of Nigerian economy.

Examining the relationship between commercial bank credit indicators and rural economic growth in Nigeria, Tajudeen (2012) employed a double-log equation in the context of Ordinary Least Square (OLS) and co-integration test. The study showed that rural economic growth is co-integrated with commercial bank credits indicators in Nigeria. The study also confirmed positive relationships between rural economic growth and commercial banks rural loans, and between commercial bank loans to agricultural and rural economic growth.

Ojong, Arikpo and Ogar (2015) investigated the role of deposit money banks on the growth of SMEs in Yakurr Local Government Area of Cross River State, Nigeria. The study adopted survey research design, and further examined the degree of relationship between bank credit, multiple taxations and government policies on the growth of small and medium scale enterprises in Nigeria. The Pearson product moment correlation statistical technique was employed. The results revealed that bank credit had a significant relationship with the growth of SMEs. Multiple taxations and government policies were found to have significant effect on SMEs growth. The authors suggested deposit money banks should be encouraged to increase the volume of loanable funds to the SMEs, while elimination of multiple taxation, reduction in corporate taxes and the strengthening of government policy framework were recommended as these will impact significantly on the growth of SMEs in Nigeria.

Safiyaay and Garba (2013) examined the role of Commercial banks in enhancing the growth of small and medium scale enterprises in Nigeria covering the period 1980 - 2009. The paper adopted descriptive method of analysis. An inductive methodology that involved observation, collection of secondary data and the statistical analysis of data collected was employed. In order to complement this approach, ratio and trend analysis was also used. It was discovered that commercial banks contribute to financing small and medium scale enterprises though their contribution has declined considerably as the government through CBN directives brought to an end the mandatory bank's credit allocations. The paper hence recommended that

commercial banks should soften on its stringent requirements so that SMEs can benefit maximally from loan advances as large companies do.

A study by Duru and Lawal (2012) assessed the impact of financial sector reforms on the growth of small scale enterprises in Nigeria. The paper employed modeling method to determine output performance of SMEs as a function of some inputs such as firms' characteristics and ownership, and credit facilities through the financial sector. The results indicated that all the variables considered have significant positive impact on the growth of SMEs in Nigeria. The study therefore concluded that financial sector reforms exert positive impact on the growth of SMEs in Nigeria, and thus recommended that the government should create an enabling environment SMEs to thrive.

METHODOLOGY

This study employed *ex-post facto* research design because the data generated for the analysis is secondary data which the researcher cannot manipulate. The data generated includes: Gross Domestic Product (GDP) which was used as a proxy for economic growth, aggregate output of SME proxied by the contribution of SMEs to GDP, Oil Revenue which was employed as a control variable in the model, and inflation which was also used as a control variable in the model. The data was sourced from Central Bank of Nigeria statistical bulletin and the study covered a period of 1986 to 2014.

Techniques of Data Analysis

This study used OLS on multiple regressions to determine the effect of the independent variables on the dependent variable. And so, to improve on the linearity of the model we introduced log in the model. The choice of OLS is mainly because it minimizes the error sum of squares and has a number of advantages such as unbiasedness, consistency, minimum variance and efficiency; it is widely used based on its property of BLUE (Best, Linear, Unbias, Estimate), simple and easy to understand (Koutsoyannis: 1971; Gujarati: 2004). The E-view econometric software 3.0 was used for this analysis. The statistical test of parameter estimates was conducted using their standard error, t-test, F-test, R, and R^2 . The economic criteria showed whether the coefficients of the variable conform to the economic *a priori* expectation, while the statistical criteria test was used to assess the significance of the overall regression.

Model Specification

This study employed multiple-regression in evaluating the effect of SMEs on the Growth of the Nigerian Economy. This study adopted and modified the model employed by Khan (2012). The

choice of this kind of model is based on its property of BLUE (Best Linear Unbiased Estimate).

The model is implicitly specified as follows;

$$GDP = f(GSMES, OILR, \text{ and } INFR) \dots \dots \dots (1)$$

The model is explicitly specified thus:

$$GDP_t = \alpha_0 + \alpha_1 GSMES + \alpha_2 OILR + \alpha_3 INFR + \varepsilon_t \dots \dots (2)$$

Where:

GDP = Gross Domestic Product

GSMES = Growth of Small and Medium Scale Enterprises

OILR = Oil Revenue

INFR = Inflation Rate

α_0 = Constant or the intercept,

$\alpha_1, \alpha_2, \alpha_3$ = the coefficients or slope of the independent variables.

ε_t = stochastic error term.

There has been several argument that the log form of a model produces a more reliable result than the non-log form due to the capacity of the log form to smoothen the data and on this ground a log form of the model is thus specified with a view to smoothen the data and to avoid the error of heteroscedasticity.

$$LOG(GDP) = \alpha_0 + \alpha_1 LOG(GSMES) + \alpha_2 LOG(OILR) + \alpha_3 INFR + \varepsilon_t \dots \dots (3)$$

Estimation Technique

The first step in this analysis is to test for the properties of the time series data with a view to determining whether or not the variables are non-stationary, stationary at level or first differencing. Having established the stationarity of the variables and they were all integrated of the same order one $I(1)$, we proceed to Johansen co-integration test which will enable us to establish if there is any co-integrating equation in the model which will suggest the existence of long run relationship among the variables under examination. Meanwhile having established that there are co-integrating equations in the model the next thing is to estimate an Error Correction Model (ECM) which will help us to determine the speed of adjustment from the short-run disequilibrium to long run equilibrium. In other words, ECM represents the short-run dynamic model in the work.

Unit Root Test

The first step involves testing the order of integration of the individual series under consideration. Researchers have developed several procedures for the test of order of integration. The most popular ones are Augmented Dickey-Fuller (ADF) test due to Dickey and

Fuller (1979, 1981), and the Phillip-Perron (PP) due to Phillips (1987) and Phillips and Perron (1988). Augmented Dickey-Fuller test relies on rejecting a null hypothesis of unit root (the series are non-stationary) in favour of the alternate hypothesis of stationarity. The tests are conducted with and without a deterministic trend (t) for each of the series. For the purpose of this study we will employ ADF in testing for the order of integration of the individual variables under study. The general form of ADF test is estimated by the following equation:

$$\Delta y_t = \alpha_0 y_{t-1} + \sum_{i=1}^n a \Delta y_i + \varepsilon^t \dots \dots \dots (4)$$

$$\Delta y_t = \alpha_0 y_{t-1} + \sum_{i=1}^n a \Delta y_i + \delta_t + \varepsilon^t \dots \dots \dots (5)$$

Where:

Y is a time series, t is a linear time trend, Δ is the first difference operator, α₀ is a constant, n is the optimum number of lags in the dependent variable and ε is the random error term; the difference between equation (4) and (5) is that the first equation included just a drift. However, the second equation includes both drift and linear time trend.

Johansen Co-Integration Test

The second step in this time series analysis is to test for the presence or otherwise of co-integration between the series of same order of integration through forming a co-integration equation. 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). A lack of co-integration suggests that such variables have no long-run relationship: in principal they can wander arbitrarily far away from each other (Dickey et. al., 1991). We employ the maximum-likelihood test procedure established by Johansen and Juselius (1990) and Johansen (1991). Specifically, if Y_t is a vector of n stochastic variables, then there exists a p-lag vector auto regression with Gaussian errors of the following form: Johansen’s methodology takes its starting point in the Vector Auto-regression (VAR) of order P given by

$$\Delta y_t = \mu + \Delta_1 y_{t-1} + \dots + \Delta_p y_{t-1} + \varepsilon^t \dots \dots \dots (6)$$

Where

Y_t is an nx1 vector of variables that are integrated of order commonly denoted (1) and ε_t is an nx1 vector of innovations.

This VAR can be rewritten as

$$\Delta y_t = \mu + \eta_{yt-1} + \sum_{i=1}^{p-1} \tau_i \Delta y_{t-1} + \varepsilon_t \dots \dots \dots (7)$$

Where:

$$\Pi = \sum_{i=1}^p A_{i-1} \text{ and } \tau_i = - \sum_{j=i-1}^p A_j$$

Johansen (1988, 1989) and Johansen and Juselius (1990) suggested two statistic test, in other to determine the number of co-integration vectors, the first one is the trace test (λ trace). It tests the null hypothesis that the number of distinct co-integrating vector is less than or equal to q against a general unrestricted alternatives $q = r$. the test calculated as follows:

$$\lambda \text{trace}(r) = -T \sum_{i=r+1} \ln(1 - \lambda_i)$$

Where

T is the number of usable observations, and the λ_1 's are the estimated eigenvalue from the matrix.

Error Correction Mechanism

The third step is to construct an ECM so as to model the dynamics of the relationship between the co-integrating equations. This step is only necessary if the test of co-integration revealed that there is co-integrating equation among variables under consideration. The essence of constructing an ECM is to enable us determine the speed of adjustment from the short-run disequilibrium to the long-run equilibrium state. And so, the greater the co-efficient of ECM the higher the speed of adjustment from the short-run disequilibrium to long-run equilibrium.

$$\text{LOG}(GDP) = a_0 + \alpha_1 \text{LOG}(GSMEs) + \alpha_2 \text{LOG}(OILR) + \alpha_3 \text{INFRT} + \text{ECM}_{t-1} + \varepsilon_t \dots \dots (8)$$

Where:

GDP_t = Gross Domestic Product

The term ECM_{t-1} is the error correction term derived from the long-run co-integrating relationship in the equation. We note that the estimate δ_1 can be interpreted as the speed of adjustment from short-run disequilibrium to long run equilibrium.

ANALYSIS AND FINDINGS

In this section the result of the Eviews econometrics analysis is presented and interpreted for easy understanding. We start with presenting and interpreting the result of the ADF which tested the order of integration with a view to determining the stationarity of the individual variables included in the model.

Table 1: Result of ADF at Level Form

Variables	ADF t-stat	1%critical value	5%critical value	10% critical value	Lag	Order of integration
LOG(GDP)	-1.647562	-3.689194	-2.971853	-2.625121	6	Non-stationary
INFRT	-2.349213	-3.689194	-2.971853	-2.625121	6	Non-stationary
LOG(GSMES)	0.247545	-3.711457	-2.981038	-2.625121	6	Non-stationary
LOG(OILR)	-2.507116	-3.689194	-2.971853	-2.629906	6	Non-stationary

Source: Eview result

The result of the ADF test at level form as presented in table 1 above revealed that the coefficient of the ADF test is lower than the critical value at both 1%, 5% and 10% level of significant respectively. This however implies that all the variables in the model are non-stationary at level form. And so, we differenced the each of the variables to see if they will be stationary at first difference.

Table 2: Result of ADF Test at 1st Difference

Variables	ADF t-stat	1%critical value	5%critical value	10% critical value	Lag	Order of integration
LOG(GDP)	-5.084153	-3.699871	-2.976263	-2.627420	6	I(1)
INFRT	-3.258086	-3.752946	-2.998064	-2.638752	6	I(1)
LOG(GSMES)	-3.727405	-4.416345	-3.622033	-3.248592	6	I(1)
LOG(OILR)	-9.026608	-3.699871	-2.976263	-2.627420	6	I(1)

Source: Eview result

The result of the ADF test at first difference as shown in table 2 above revealed that the ADF test statistics is higher than the critical value at both 1%, 5% and 10% level of significant, this however implies that all the variables included in the model are integrated of the same order one I(1). In other words the result shows that all the variables are stationary at 1%,5% and 10% level of significant respectively. Having established stationarity among the variables, the implication is that there could be a long run relationship among the variables that are integrated of the same order, and so we proceeded to test for co-integration so as to determine the number of co-integrating equations in the model.

Table 3: Result of Johansen Co-Integration Analysis

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	5% Critical Value	Prob.**
None *	0.704655	66.86688	47.85613	0.0003
At most 1 *	0.541628	33.93735	29.79707	0.0158
At most 2	0.333186	12.87535	15.49471	0.1195
At most 3	0.069116	1.933746	3.841466	0.1643

Source: Eview Result

It can be seen from the result of the Eviews analysis reported in table 3 above that there is at most two co-integrating equation at 5% level of significant as indicated by Trace test statistics. This result however implies that there is a long run relationship existing between the variables under consideration. It is important to note that the only variable that will be included in running the Johansen co-integration test is the ones that are integrated of same order one I(1). Meanwhile having established a long run relationship between the variables under investigation, the next step in our analysis is to estimate the error correction model.

Table 4: The Result of the Short-Run Dynamic Regression Model

Dependent Variable: LOG (GDP)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.270972	0.050538	5.361733	0.0000
D(LOG(GSMES))	1.256048	0.771513	6.628032	0.0084
D(LOG(OILR))	0.002201	0.069220	3.031799	0.0149
D(INFRT)	0.001666	0.002883	2.577725	0.0426
ECM(-1)	0.428384	0.076801	3.629993	0.0035

Source: Eview result

The result of the short run dynamics model as represented in table 4 above indicates that GSMES, OILR, and INFRT has a positive and significant impact on economic growth in Nigeria proxied by GDP. In other words it shows that in the short run GSMES, INFRT and OILR has a positive and statistically significant impact on the growth of the Nigerian economy. The result shows that the coefficient of error correction model is 0.428384, which implies that about 42.8% of the disequilibrium in the model will be corrected annually. However this also implies that 42.83% of the disequilibrium in the short run will be corrected in the long run.

Table 5: Result of the Long-Run Regression Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.339411	4.154765	2.007192	0.0557
LOG(GSMES)	1.040009	0.530997	1.958598	0.0614
LOG(OILR)	0.662465	0.079341	8.349610	0.0000
INFRT	-0.006883	0.005735	-1.200189	0.2413
R-squared	0.936402	F-statistic	122.6974	
Adjusted R-squared	0.928770	Prob(F-statistic)	0.000000	
Durbin-Watson stat	1.015404			

Source: Eview result

Table 5 above shows the result of the long run model which reveals the coefficient of GSEMS is 1.040009 with a probability value of 0.0614 indicating that GSMES has a positive and non-

significant impact on the growth of the Nigerian economy in the long run. It was also shown in the result above that OILR has a coefficient of 0.662465 with a probability value of 0.0000 indicating that there is a positive and significant relationship between OILR and economic growth in Nigeria in the long run. The result of the long run model also shows that inflation has a negative and non-significant relationship with economic growth in Nigeria in the long run. The result of R^2 and that of the adjusted R^2 with a value of 0.936402 and 0.928770 shows that the line of best fit is highly fitted. In other words, the result also implies that in the long run, about 93% of the variation in the dependent variables was attributed to the variation in the independent variables included in the model. The result F-statistics as shown in the table 4.5 above also reveals that the overall regression is statistically significant at 5% level of significant. The test for autocorrelation represented by the Durbin-Watson statistics indicates that there is likely presence of autocorrelation in the model.

CONCLUSIONS

This study examined the impact of Small and Medium Scale Enterprises (SME) on the growth of the Nigerian economy with a particular look at the short and long run dynamics. The study found that in the short run, SME has a positive and significant impact on the growth of the Nigerian economy for the period under study. Long run result also showed a positive impact of SME on growth but the effect was shown to be insignificant. This however implies that the full potentials of SME have not been effectively tapped into. And so, government should design economic policies that will stimulate the growth of SME in Nigeria by increasing budgetary allocation to this sector, provision of credit facility to all the facets of SME like that of Agricultural Credit Guarantee Schemes. Banks also should be encouraged to provide more credit facility to SME at a reduced cost of capital as this will enhance and stimulate the growth of SMEs in Nigeria which will translate to overall economic growth.

REFERENCES

- Afolabi, M. O. (2013). Growth effect of Small and Medium Enterprises (SMEs) Financing in Nigeria" *Journal of African Macroeconomic Review*, 3(1), 193-205.
- Akingunola, R. O. (2011). Small and Medium Scale Enterprises and Economic Growth in Nigeria: An Assessment of Financing Options. *Pakistan Journal of Business and Economic Review*, 2(1).
- Anyanwu, C M. (2003). *The Role of Central Bank Of Nigeria in Enterprises Financing*. Publication of CBN Training Centre, Lagos.
- Dada, R. M. (2014). Commercial Banks' Credit and SMEs Development in Nigeria: An Empirical Review. *International Journal of Research (IJR)*, 1, Issue-8.
- Duru, M. and Lawal, M. K. (2012). Financial sector Reforms and the Growth of Small and Medium Scale Enterprises (SMEs) in Nigeria. *Universal Journal of Management and Social Sciences*, 2(2), 86-97.

- Fashola, B. R. (2013): "Structure of SMEs in Nigeria" A paper delivered by Mr. Ayo Gbeleyi while representing the executive governor of Lagos State, Governor Babatunde Raji Fashola at the First Bank of Nigeria Limited SME Connect Conference titled: "SMEs at the Heart of National Development : Creativity, Capacity and Capital. Lagos.
- Imoughele, L. E and Ismaila, M (2013): "Commercial Bank Credit Accessibility and sectoral output Performance in a Deregulated Financial market Economy: Empirical Evidence from Nigeria. *Journal of Finance and Bank Management*, 1(2), 36-59.
- Nwosa, P. I. and Oseni, I. O. (2012).The impact of Banks Loan to SMEs on Manufacturing Output in Nigeria.*Journal of Social and Development Sciences*, 4(5), 212-217.
- Ogujiuba, K. K., Ohuche, F. K., and Adenuga, A. O. (2004). Credit Availability to Small and Medium Scale Enterprises in Nigeria: Importance of New Capital Base for Banks – Background and Issues. Working Paper.
- Ojong, C. M., Arikpo, O. A., and Ogar, A. (2015).The Role Of Deposit Money Banks on The Growth of SMEs in Cross River State. *Nigeria Council for Innovative Research Journal of Social Sciences Research*, 6(2).
- Okufolami, D. M. (2003). "Central Bank Of Nigeria Seminar On Small And Medium Industries Equity Investments SCHEME (SMIEIS)" Publication of CBN Training Centre, Lagos, (4).
- Olorunshola, A. (2003). *Problems and Prospects Of Small And Medium-Scale Industries In Nigeria Job*. Publication of CBN Training Centre, Lagos.
- Salami, A. T. (2003). *Guidelines and Stakeholders Responsibilities in SMIEIS*. Publication of CBN Training Centre, Lagos.
- Safiyah M.A and Garba B.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).
- Tajudeen, E. (2012). Bank credits and rural development in Nigeria (1982-2009).*International Journal of Finance and Accounting*. 1(3), 45-52.
- Tawose, J.O.B. (2012). Effects of Bank Credit on Industrial Performance in Nigeria International Business and Management.*Canadian Research & Development Center of Sciences and Cultures*, 4(2), 158-168