

The Impact of Trade Liberalization on Small and Medium Scale Enterprise Growth in Nigeria (1986-2016)

¹Likita Ogba, ²Idisi Park & ³Charity Philip Sidi

^{1&3}Department of Economics, University of Jos

²University of Abuja, Nigeria

Abstract

This study examines the impact of trade liberalization on Small and Medium Scale Enterprises (SMEs) growth in Nigeria, as a strategy for the diversification of the economy through trade liberalization especially on the SMEs sector. Data used for this study was sourced from Central Bank of Nigeria (CBN) 2016 statistical bulletin and bureau of statistics from 1986 to 2016. SMEs outputs was used as dependent variable, while trade openness which is a proxy for trade liberalization, import, export and exchange rate were used as the independent variables. The study adopted the Autoregressive Distributed lag (ARDL) estimation for analyses; pre-diagnostic, post-diagnostic test and unit root test was carried out on the variables to find out if they were stationary in order to ascertain the exact estimation techniques, the ADF result found that trade openness was stationary at level while, SMEs output, export, import and exchange rate were stationary at first difference. This justifies the adoption of the ARDL method of analysis. The result of the findings revealed that Trade openness is positive and is statistically significant to SMEs output for the period under consideration, this implies that trade openness enables the expansion of economic opportunities by enlarging markets and enhancing knowledge spill over, hence the more trade is liberalized the more the output of SMEs in Nigeria. The study concluded that trade liberalization is a veritable policy tool through which the SMEs can grow and perhaps will also lead to the growth of the Nigeria economy as a whole. The study recommended among others that Government should ensure that the economy is open to the extent that would have greater impact on the growth of SMEs. Small and medium scale enterprises in Nigeria should be encouraged by government, by giving those SMEs incentives, subsidies and improving the technological and infrastructural development so as to increase the sectors contribution to GDP, exportation of its manufactured product and employment in the country.

Keywords: *Trade liberalization, SMEs, Import, Export, Exchange rate*

Corresponding Author:

Likita Ogba

Background of the Study

Many developing and developed nations of the world are of the view that openness of an economy will accelerate trade between countries. Trade liberalization started in 1947, after the 2nd world war, with the inception of the General Agreement on Tariff and Trade (GATT). The GATT was negotiated in 1947 by 23 countries. The main focal point of the GATT was to lower trade barriers. GATT was later replaced by the World Trade Organization (WTO) in 1994. The WTO is widely seen as promoting prosperity through trade, especially favouring the developing countries. This is presented so as to achieve fair trade and economic growth in developing countries (WTO, 2013). The notion of trade liberalization probably draws from the classical neoclassical trade theory, which argues that free trade promotes economic efficiency, and economic growth through its dynamics effects, similarly, trade liberalization helps to allocate resources in line with comparative advantage which engender the exploitation of economics of scale in production and thereby enhance capacity utilization and employment. Even if this arguments is ignored, a liberalized trade regime which permits the importation of raw materials, capital and intermediate goods and spare parts, ceteris paribus will increase domestic production. This in particular applies to SMEs in developing countries that rely heavily on imported inputs for production activities.

In June, (1986) the federal republic of Nigeria adopted Structural Adjustment Program (SAP) which was aimed at trade liberalization, opening the economy to increase international trade, particularly by either reducing or removing protection for domestic industries, removal of subsidies, reduce its dependence on expensive importation and encourage domestic production specifically in the SMEs sector, a lesser dependence on oil revenues, privatization of government parastatals, and devaluation of the exchange rate (an integral part of trade liberalization policies), this seeks to improve the trade balance, on one hand, worsen the burden of financing international trade. (Adenikinju and Chete, 2002; Khattry, 2003). The World Bank supported the programme and contributed over 450 million US dollar to aid international trade.

Prior to trade liberalization the Nigerian government at various levels in one way or the other has focused attention on the performance of the private sector specifically the small and medium scale enterprises for economic gains. Small and medium scale enterprises are facing a lot of challenges despites government effort to revive the SMEs, most of the challenges faced by the SMEs are difficulty of gaining access to bank credit, undercapitalization and corruption. There is an urgent need to provide the enabling environment for the growth of SMEs, so that they could adequately play the role expected of them in economic transformation and diversification, such roles include mobilization of domestic product, increased harnessing of local raw materials, employment generation, technological development and export diversification. This will be made possible through a proper implementation of trade policies and a responsive trade liberalization policy by the government, there is that need for SMEs to access the global market and upgrade their position within the international market which have become increasingly difficult due to competition (Abonyi, 2003) and as such most of these SMEs are quite vulnerable to external shocks due to the global competition from the liberalization of trade. SMEs output has

contributed a lot in Nigeria's trade with other countries of the world in international trade most of this goods are exported to other countries thereby increasing the country's GDP. This increase in international trade participation could be achieved if the country adopts trade liberalization or free trade in order to encourage or create competitive business environment with the removal of restrictions on international trade.

The need to realize the potentials of the SME's sub-sector in Nigeria during trade liberalization still remains an unresolved issue; consequently seeking answers to this question becomes pertinent: What extent has trade liberalization policy impacted on SMEs growth in Nigeria? Has exports accelerated the growth of SMEs output? What is the extent of the relationship between exchange rate on SMEs growth in Nigeria? Does import contributes to the growth of SMEs outputs? Hence the need for this study which examine the impact of trade liberalization on SMEs growth in Nigeria

Hypotheses

This paper seeks to empirically examine the following hypotheses, which are stated in there null forms.

- H₀: Trade liberalization has no significant impact on SMEs growth in Nigeria.
- H₀: Exports has no significant impact on the growth of SMEs outputs.
- H₀: There is no significant impact of exchange rate on SMEs output in Nigeria.
- H₀: Import does not significantly affect the growth of SMEs

The paper has been structured into five sections with the introduction as section one where the background, problem statement, questions, objectives and hypotheses are covered. Section two presents the literature review which contains conceptual and theoretical frameworks as well empirical evidences. Section three forms the methodology of the paper. Section four deals with the analysis of the empirical result and discussion of findings. Section five provides the conclusion and policy recommendations.

Literature Review

The Concept of Trade liberalization

Trade liberalization which is also referred to as free trade, trade liberalization is the removal or reduction of all barriers to trade to ensure a free flow of trade between countries of the world, According to Greenaway (1998, p. 492) “trade liberalization is the removal of tariff, or any other intervention which restores the free trade set of relative prices change in government policy which reduces anti-export bias and moves the relative prices of tradable towards neutrality; the substitution of more efficient for less efficient forms of intervention”. This obliqueness is reflected in the range of measures used empirically. A widely used indicator is changes in nominal tariffs. This has the virtue of simplicity: it is relatively straightforward to compute and interpret. It also has some important limitations. First, there may be instrument substitution taking place: nominal tariffs may well be lowered but at the same time safeguard or anti-dumping measures introduced. Secondly, depending on the pattern of tariff reductions, average effective protection can increase at the same time as nominal tariffs decline. An alternative strategy therefore is to estimate convergence to relative price neutrality, or changes in the degree of anti-export bias.

Basically, the main purpose of trade liberalization is to allow countries to export those goods and services that they can produce efficiently, and import the goods and services that they produce inefficiently (Emmanuel, 2017). Of some key components are openness of the markets, import tariff, investment flow and privatization of the industries.

Trade liberalization usually aims at the removal of trade barriers and relative price bias, which aims to increase competitiveness, demand contraction; increasing the supply and diversity of tradable in line with comparative advantages defined by endowed factor-price ratios (Bongsha 2011), while Bezuneh and Yiheyi (2009) saw trade liberalization as a process of becoming open to international trade through a systematic reduction and eventual elimination of tariffs and other barriers between trading partners.

Concept of Small and Medium Scale Enterprise

The definition of Small and Medium Scale Enterprises (SMEs) are relative and they differ from industry to industry and country to country. The divergence amongst industries could be ascribed to the different capital requirement of each business, sales or investment, while those among countries could arise as a result of differences in industrial organizations of countries at different stages of economic development. Globally, several definitions of small businesses have been advanced over the years. In Nigeria, Alarape (2008) defines it as “an enterprise with a labour size of 11-100 employees or a total cost of not less than N 50 million, including working capital but excluding cost of land”. The medium businesses 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.

What might therefore be defined as SME in a developed country can be regarded as a large scale enterprise in a developing country; using such parameters as fixed investment and employment of labour force (CBN, 2004). However, in Nigeria the introduction of the National Policy on MSMEs has addressed the issue of definition as to what constitutes micro, small and medium enterprises. The definition adopts a classification based on dual criteria, employment and assets (excluding land and buildings) Size Category Employment Assets (N Million) (land and buildings) Micro enterprises employ Less than 10 employees and having asset less than 5 million. Small enterprises 10 to 49 employees and having 5 to less than 50 million, while Medium enterprises has 50 to 199 employee 50 to less than 500 million.(National policy on MSMEs, 2012). With regard to small businesses, several definitions of small businesses have been advanced over the years.

For multilateral development institutions, such as the World Bank, varied classifications exist for defining SMEs. The World Bank's definition includes businesses three times larger by employees and five times larger by turnover or assets than the largest SME under the Multilateral Investment Fund (MIF) definition. At the same time, the average gross national income per capita (PC-GNI) of the developing member countries of the World Bank Group is significantly less than the average PC-GNI for the countries of Latin America and the Caribbean served by the MIF (World bank, 2012).

This study therefore, views SMEs on the nature of the business, size of business, ownership and number of employee. Annual turnover. Small and medium-sized enterprises are firms or businesses which are small or medium in size, which arose from entrepreneurial activities of individuals. SMEs, are not limited to any particular type of industry or services, and can include small manufacturing facilities, small processing units, small scale farmers, Trading companies, export-import companies distribution, retailing, rental Services Company, mining etc. The most valid measures for defining SME are number of employees and size.

Theoretical Underpinning

The theory of Comparative Advantage was propounded by David Ricardo (1817) according to this theory; each country will specialize in the production of those commodities in which it has greater comparative advantage or least comparative disadvantage (Jhingan 2009). Therefore, a country will export those commodities in which its comparative advantage is the greatest, and import those commodities in which its comparative disadvantage is the least. Furthermore, according to this theory countries should focus in the production of those commodity which it has comparative advantage, considering most SMEs in Nigeria it could be based on the fact that SMEs are producers of certain goods and services which are sold abroad in order to gain and accumulate foreign trade, these goods include cocoa, yam, cashew nuts coffee, rubber and textile materials etc. As long as Nigeria has comparative advantage of these commodities, trade between Nigeria and other countries would always be possible and of great benefit to the country.

Ricardo demonstrated that for the two nations without input factor mobility, specialization and trade could result in increased total output and lower costs than if each nation tried to produce in isolation. However the Heckscher-Ohlin theory determines the pattern of production, specialization and trade among regions is the relative availability of factor prices (Factor endowment such as availability of resources include gift of nature and as well as man-made means of production) and factor prices. Developing countries, Nigeria inclusive are richly endowed with rich mineral resources while some countries have much capital-intensive goods and countries that have much labour will export labor-intensive goods. The immediate cause of international trade always is that some commodities can be bought more cheaply from other regions, particularly in developing countries where only few SMEs are into production, the unprocessed materials are usually exported to developed countries at a cheaper rates, when it is transformed into finished goods or commodity they are imported and sold at an exorbitant prices, whereas in the same region their production is possible at high prices. Thus the main cause of trade between regions is the difference in prices of commodities. One implication of this frame work is that trade increases the real return to the factor that is relatively abundant in each country and lowers the real return to the other factors.

The Schumpeter theory of innovation assumes that for a country to develop there must be some level of innovation, economic growth can be achieved by increasing inputs in production process (Clemence, 2009). Similarly SMEs are expected to grow by increasing inputs and introducing new method of production in their production processes, and this in

turn will accelerate and improve the economy. By innovation he means the changes in the method of production and transportation, production of new product, changes in the industrial organization, opening of a new market etc. The idea of SMEs been innovative refers to the commercial application of new technology, new material, and new sources of energy instead of invention.

Specialization justifies more resources to that particular production process thus leading to more innovation. The new trade theory argues that international trade can actually increase the rate of innovation and technological change. The innovative theory concept which states that increased innovation is a catalyst for economic growth. Applying these theories to the Nigeria SMEs, Nigeria should use increased competition economic growth and greater innovation production process that is labour intensive. However Nigeria SMEs should produce and export goods they have more efficiency in production and export such goods for more revenue which brings about increase in innovation in Nigerian economy. Consequently Schumpeters theory posits that innovation in business is the major reason for increased investments and business.

Empirical Review

Tambunam (2008) conducted a study on trade liberalization effects on the development of SMEs in Indonesia. The study examined the various policies initiated by the Indonesia government and the implication of such policies reforms on the growth of SMEs, Secondary data and information was used, adopting a descriptive method of analysis. The finding shows that trade liberalization reforms has not affected SMEs negatively, the research however recommends that government should take concrete actions in order to help SMEs maximize benefits and minimize losses related to the trade reforms over the long run.

In the same vein Obokoh (2014) conducted a study on small and medium sized enterprises development under trade liberalization in Nigeria, the study reviews the policies implemented by the Nigerian government over the years to assist the development of manufacturing small and medium sized enterprises (SMEs) following the implementation of Trade liberalization policy in 1986. The study utilized a structured questionnaire survey administered to 500 manufacturing SMEs operating in Lagos state to achieve its objectives. The result of the findings reveals that despite the laudable policies, the effects are not felt by most manufacturing SMEs due to improper planning and the absence of favorable investment climate necessary for these policies to be effective.

Sanjo and Ibrahim (2017), examined the effect of international business on SMEs growth in a competitive environment. The study adopted the ordinary least square model of data analyses. Their finding revealed that trade openness as a measure of competitiveness and foreign Direct Investment (FDI) has no significant effect on SMEs growth in Nigeria. It was also revealed that exchange rate has a significant effect on SMEs growth, and the level at which exchange rate affects SMEs growth is relatively high. It further shows that the exchange rate has a negative coefficient indicating that, as the exchange rate reduces SMEs growth increases. As opined by Kandil (2004) using a theoretical model that decomposes

movements in the exchange rate into anticipated and unanticipated components suggests that anticipated exchange rate depreciation determines the cost of imported intermediate goods and hence, the output supplied. In contrast, unanticipated currency fluctuations determine aggregate demand through export imports and the demand for currency, and determine aggregate supply through the cost of imported intermediate goods. In conclusion Kandil proved that for a varying degree of openness, exchange rate fluctuations generate adverse effects on economic performance in a variety of developing countries. These effects are evident by output contraction and price inflation.

A study conducted by Obokoh, Ojiako, Unam, Ehiobuche and Monday (2017), they examined the impact of exchange rate depreciation on the performance and development of Manufacturing Small and Medium Sized Enterprises (SMEs) in Nigeria. Data were obtained from a questionnaire survey of 500 manufacturing SMEs and analyzed using descriptive statistics. Chow test was used to determine whether there was structural change in Nigeria's non-oil export after the deregulation of exchange. The results of the data analysis suggest a very high sensitivity of SMEs' performance and cost of operations to exchange rate fluctuations. The results further suggest that SMEs' efficiency did not improve; neither were they able to take advantage of the liberalized trade to export their products. The policy did not positively affect Nigeria's non-oil export. Considering Nigeria's re-basing of its GDP and in effect becoming Africa's largest economy, there is a real interest in understanding how fluctuations in exchange rates impact on SMEs activities which account for a substantial part of Nigeria's economic activities.

In studying trade liberalization and industrial performance in Nigeria, Adebisi (2006) employed a model that explore the short run dynamics around the variables namely: index of industrial production lagged one period, the degree of openness (trade liberalization), trade liberalization dummy and real export which appear as significant determinants of index of industrial production. The findings show that there is no unique co integral relationship between the index of industrial production and its major determinants. However, the results of the error correction model (ECM) revealed that index of industrial production lagged one period, the degree of openness (trade liberalization), trade liberalization dummy variable and real exports emerged as significant determinants of index of industrial production in Nigeria.

Bongsha (2011) examined the impact of trade liberalization on the manufacturing sector in Cameroon from 1980-2006, the study adopted the Ordinary Least Squares (OLS). He found that reduction in protection rates (tariff) did not affect manufacturing positively, as measured by the export performance. The result from the estimation of the single equation supply model reveals that the relative price variable proxy for by the exchange rate and imported inputs is an important determinant of the performance of the manufacturing sector, as measured by export performance, though not statistically significant. Thus, this study therefore will fill the gap by employing secondary data to find out the impact of trade liberalization on SMEs growth in Nigeria, independent variables that will be manipulated is exchange rate, openness which is a proxy of trade liberalization, export and import, the period is from 1986 to 2016.

Methodology and Model Specification

To test the null hypotheses, this paper used secondary data and employed annual time series data for the period 1986 to 2016 drawn from the central bank of Nigeria Statistical Bulletin and Bureau of Statistics (2016) SMEs output is the dependent variable, while trade openness which is a proxy for trade liberalization, import, export and exchange rate are the independent variables. The study employs the preliminary and post diagnostic test on all the variables.

Model Specification

The relationship expressed in this research is between SMEs Output which is a function of Trade Openness as proxy for trade liberalization, Export, Import and Exchange Rate. The model of analysis for this study is given in the following functional form as,

$$SMEOT = f(TOP_t, EXT_t, IMT_t, EXG_t) \dots\dots\dots (1)$$

Where

- SMEOT = Small and Medium Scale Enterprise Output
- TOP = Trade Openness
- EXT = Export
- IMT = Import
- EXG = Exchange Rate

Equation (1) is transformed into an econometric model and is expressed as

$$Y = \beta_0 + \beta_1 OPT + \beta_2 EXT + \beta_3 IMT + \beta_4 EXG + \mu_t \dots\dots\dots (2)$$

Where

- Y = SMEOT
- β_0 = intercept of the model or constant term of stochastic term
- β_1 to β_4 = coefficient of explanatory variables
- μ = error term
- T = time period

In a more explicit form, the model can be written in a log-linear form to transform the variables into the same unit and base.

$$\text{Log SMEOT} = \beta_0 + \beta_1 \text{Log TOP}_t + \beta_2 \text{Log EXT}_t + \beta_3 \text{Log IMT}_t + \beta_4 \text{Log EXG}_t + \mu \dots\dots\dots (3)$$

Where,

- Log = Natural Logarithm

Estimation Technique

The technique for analysis is the Autoregressive Distributed Lag model (ARDL), the reason for the choice of ARDL is influenced by its advantageous position over other estimation techniques like the Granger causality, Engle and Granger (1987), Johansen (1991), Johansen and Juselius (1990) and Gregory and Hansen (1996) which often require that the variables are of the same order of integration, besides their preference for large data size for validity of results to hold (Babajide, Lawal and Somoye, 2016). ARDL includes the lag of the dependent variable as part of the explanatory variables automatically transformed our behavioral equation (equation 1) which is expressed to the ARDL form below.

$$\Delta \text{LOGSMEsOT} = \beta_0 + \beta_1 \text{LOGSMEsOT}_t + \beta_2 \text{LOGTOP}_t + \beta_3 \text{LOGEXT}_t + \beta_4 \text{LOGIMT}_t + \beta_5 \text{LOGEXG}_t + \mu t \text{-----} (4)$$

The présence of co-integration was then tested using bounds test to check for long run Relationship in the model (Pesaran and Shin, 1999). The behavioural équation is further transformed to include the long rune quation as indicated below :

$$\Delta \text{LOGSMEsOT} = \beta_0 + \beta_1 \text{LOGSMEsOT}_t + \beta_2 \text{LOGTOP}_t + \beta_3 \text{LOGEXT}_t + \beta_4 \text{LOGIMT}_t + \beta_5 \text{LOGEXG}_t + \beta_2 \text{LOGTOP}_t + \beta_3 \text{LOGEXT}_t + \beta_4 \text{LOGIMT}_t + \beta_5 \text{LOGEXG}_t + \mu t \text{-----} (5)$$

Analysis and Discussion of Findings

This study applied unit root test to determine if the data is stationary before any analysis can be conducted. Unit root tests are test for stationary in a time series. A time series has stationary if a shift in time does not cause a change in the shape of the distribution; unit roots are one cause for non-stationary. It is recommended that the unit root test is conducted to validate the data for analysis. The unit root was tested using Augmented dickey fuller (ADF) at 5% level of significance. The justification for the application of Augmented Dickey-Fuller test was the enhancement of stationary series and for the avoidance of spurious parameters. Also, the choice of lag length was lag (0) which was used uniformly for all variables. The result is shown in the Table 1.

Table 1: Summary of ADF Unit Root Test

Variable	ADF Statistics	P.Value	1%	5%	10%	Order of Integration	Conclusion
LOGSMEsOT	-5.363895	0.0002	-3.711457	-2.981038	-2.629906	1(1)	Stationary
LOGTOP	-3.326165	0.0225	-3.670170	-2.963972	-2.621007	1(0)	Stationary
LOGEXT	-6.105299	0.0000	-3.679322	-2.967767	-2.622989	1(1)	Stationary
LOGIMT	-4.279905	0.0023	-3.679322	-2.967767	-2.622989	1(1)	Stationary
LOGEXG	-3.637899	0.0110	-3.679322	-2.967767	-2.622989	1(1)	Stationary

Source: Authors Computation Using Eview 10 Output

Table 1 shows the result of the unit root test estimated via ADF for all the variables both in levels and first difference form. The result shows that the order of integration for the variables is a mixture of I (0) and I (1) which implies that we cannot reject the null hypothesis of unit root for all the variables except trade openness (TOP) which is found to be stationary at 5% level of significance with a P-value of 0.0225 that is stationary at level 1(0). SMEs output (SMEsOT), exports (EXT), import (IMT) and exchange rate (EXG) became stationary only at first differencing i.e. 1(1) at 5% level of significance with a p-values of 0.0002, 0.0000, 0.0023 and 0.0110 respectively. This implies that the test for co-integration cannot be determined by Johansen co-integration rather by bounds co-integration test (Pesaran, Shin & Smith 2001). Therefore, this justifies the application of Autoregressive Distributed Lag (ARDL) in this study to estimate the equation of variables exhibiting a unit root like this, where some variables are stationary at level and some stationary after first differencing (Pesaran and Shin, 1999).

Autoregressive Distributed LAG (ARDL) Test

Having established that the series in the ADF analysis are integrated of order of 1(1) except openness which was stationary at level 1(0). This justifies the adoption of the ARDL method of analysis in this study. The result of the ARDL estimation is depicted in Table 2.

Table 2: Autoregressive Distributed Lag (ARDL) Model Estimation Result

Variable	Coefficient	Standard Error	t-Statistic	Probability
LOGSMEsOT(-2)	-0.936415	0.238188	-3.931415	0.0020
LOGTOP(2)	177883.9	786509.9	0.226169	0.8249
LOGEXT(2)	740579.7	355072.7	2.085713	0.0590
LOGIMT(0)	1310306	410207.8	3.194250	0.0077
LOGEXG(1)	2358721	919169.0	2.566145	0.0247
C	-2786953	4071076	-6.845721	0.0000

Source: Author's Computation using Eviews 10

R-squared=0.977690 Adjusted R-squared=0.949802 F-statistics =35.05826 Probability (F-statistics) =0.000000

The result of the ARDL revealed that there is a negative relationship between previous years SMEs output and current year SMEs output; it is shown by a negative value of the coefficient of SMEs output of -0.936415. However, the probability value of 0.0020 revealed that it was statistically significant at 5% level of significance. The coefficient of Trade openness stood at 177883.9, shows that an increase in trade openness would lead to an increase in SMEs output; however the probability value of 0.8249 showed that it is not statistically significant. One year lag of Export affected SMEs output positively with a coefficient of 740579.7 and with a p-value of 0.0590 at 5% level of significance revealed that it is not statistically significant, but has a positive relationship to SMEs output. Two years lag of Import and Exchange rate affected SMEs output positively; with a coefficient of 1310306 and 2358721, were both found to be statistically significant at a probability level of 0.0077 and 0.0247, respectively.

The constant terms of the equation (c) -27869453 revealed the value of SMEs output when it was not affected by any of the independent variables. This implies that the SMEs output would be -27869453 if all the explanatory variables were zero. The value of R-squared (0.977690) shows an excellent goodness of fit of the model; this implies that 97.76% of the variation of SMEs output was accounted for by joint variation of a combination of the independent variables. Also, the value of Adjusted R-squared (0.949802) depicts an overall goodness of fit of the model of 94.98%; it therefore shows that the model was corrected and has a good fit. This is supported by the values of the F-statistic (35.05826) with a probability value of 0.000000 which is less than 5% level of significance. The F-statistics measures the joint statistical influence of the explanatory variables in explaining the dependent variables, thus the influence of the explanatory variables on the dependent variable was statistically significant.

Table 3: Bounds Co-integration Test

Null Hypothesis: No levels relationship				
F-Bounds Test				
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	7.327703	10%	2.08	3
K	5	5%	2.39	3.38
		2.5%	2.7	3.73
		1%	3.06	4.15

Source: Author's computation using E-views 10

Table 3 shows the result of the Bound test for co-integration for all the variables based on the result the F-statistics value of 7.327703 is greater than the chosen critical value of I(0) and I(1) at 5% level of significance (2.39) and (3.38) respectively, this indicates the presence of co-integration and long run relationship in the model; therefore rejecting the null hypothesis which means that there is a long run relationship in the model.

**Table 4: ARDL For Long and Short Run Relationship
ARDL Cointegration and Long Run Result
ARDL (2,2,2,2,0,2) Selected Model**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(SMES_OUTPUT(t))	0.936415	0.238188	3.931415	0.0020
D(LOGSMES_OUTPUT)	1251747.	113094.9	11.06811	0.0000
D(LOGSMES_OUTPUT(1))	-1071702.	305689.5	-3.505851	0.0043
D(LOGOPENNESS)	177883.9	786509.9	0.226169	0.8249
D(LOGOPENNESS(t))	2920216.	795648.2	3.670236	0.0032
D(LOGEXPORT)	-1288426.	396826.9	-3.246821	0.0070
D(LOGEXPORT(t))	-740579.7	355072.7	-2.085713	0.0590
D(LOGIMPORT)	1310306	410207.8	3.194250	0.0077
D(LOGEXCHANGE_RATE(-1))	1699730.	790665.3	2.149747	0.0527
LOGSMES_OUTPUT	1047866.	95499.15	10.97252	0.0000
LOGOPENNESS	2296128.	483957.5	-4.744483	0.0005
LOGEXPORT	-524895.3	279575.1	-1.877475	0.0850
LOGIMPORT	788128.7	269497.6	2.924436	0.0127
LOGEXCHANGE_RATE				
E	-94950.89	309833.6	-0.306458	0.7645
C	-16763040	2068652.	-8.103364	0.0000

Source: Authors Computation using Eviews 10

Cointeq = SMES_OUTPUT - (1047866.3582*LOGSMES_OUTPUT -2296128.0561

*LOGOPENNESS -524895.2718*LOGEXPORT + 788128.6949

*LOGIMPORT -94950.8884*LOGEXCHANGE_RATE -16763040.4998)

*D** represent the short run form and while the values without D represent the long run.

Short Run Form

The short run form of the Autoregressive distributed lag (ARDL) estimation result is displayed in Table 4. One year lag of SMEs Output was found to be positive with a coefficient of 1251747 and a p-value of 0.0000 revealed that this was statistically significant at 5% level of significance. Openness was also found to be significant with a coefficient of 2920216 and a p-value of 0.0032. The coefficient of export at lag one is negative with a value of -740579.7 and a p-value of 0.0590 is statistically insignificant at 5% level of significance, export has a negative weak relationship to the growth of SMEs output, the implication is that one year lag of export affected SMEs output negatively, reasons could be that the SMEs output that are being exported are mostly unprocessed item which are sold at a cheaper price in the international market and only few processed item are being exported. One year lag of import stood at 1310306 and a p-value of 0.0077 indicating a positive relationship between import and SMEs output, this implies that import has a significant impact on SMEs output, this is due to the fact that as a result of openness of the economy, items that are being imported into the country are more of capital goods such as machinery which has increased the productive capacity of the SMEs, thereby accelerated the SMEs output. Exchange rate was found to be negative with a coefficient of 1699730, however with the p-value of 0.0527 at 5% revealed that it is statistically insignificant to the growth of SMEs output.

Long Run Form

In the long run SMEs outputs was found to have a negative coefficient of -1047866 and a p-value of 0.0000 and Openness was found to be positive with a value of 2296128 and a p-value of 0.0005 indicating a positive relationship between openness and SMEs output, This result is consistent with the findings of Tambunam (2008) who studied trade liberalization effects on the development of SMEs in Indonesia he found that trade liberalization reforms has not affected SMEs negatively but on the contrary, the finding of this present study does not agree with the result of Obokoh (2014) on small and medium sized enterprises development under trade liberalization. Liberalization has opened up the Nigerian economy and integrated it with the world economy. Hence the SMEs enjoy the benefits of selling their products and services in the international market than being confined into domestic market. The free economy ushers in accessibility to bigger markets, greater linkages for SMEs with larger companies and marketing outfits, improved manufacturing techniques and processes; hence openness has enabled the expansion of economic opportunities by enlarging markets and enhancing knowledge spill over.

Export has a coefficient of -524895.3 and a p-value of 0.0850 which is found to be insignificant to the growth of SMEs output in the Nigeria economy. The result is commensurate with the findings of Bongsha (2011) on the impact of trade liberalization on the manufacturing sector in Cameroon from 1980-2006, as measured by export performance, though not statistically significant. This result is explained by the fact that importation of some inputs cannot be reduced. Moreover, Nigeria's Manufacturing SMEs are apparently unable to satisfy domestic demand and are uncompetitive. This present study is in contrast to the study by Adebisi (2006), in his study on trade liberalization and industrial performance in Nigeria, employed a model that explore the short run dynamics

around the variables, and in his findings it was revealed that exports emerged as a significant determinant of index of industrial production in Nigeria. This present study found export to be statistically insignificant on SMEs growth and suggest that the use of tariffs, quotas and export subsidies as the main tools of trade policy to influence the SMEs sector performance needs to be reconsidered in light of the findings of this research and should be reconceptualized and aligned to a dynamic industrial policy. Import with the coefficient of 788128.7 and a p-value of 0.0127 was found to be statistically significant indicating a positive relationship between import and SMEs output in the economy.

Exchange rate was found to have a negative relationship on SMEs output with a coefficient of -94950.89 and a p-value 0.7645, hence exchange rate is insignificant to SMEs output, is in contrast with Sanjo and Ibrahim (2017), that examined the effect of international business on SMEs growth in a competitive environment, their finding revealed that the exchange rate has a significant effect on SMEs growth in Nigeria, and the level at which exchange rate affects SMEs growth is relatively high. It further showed that the exchange rate has a negative coefficient indicating that, as the exchange rate reduces SMEs growth increases. Similarly, Kandil (2004) proved that for a varying degree of openness, exchange rate fluctuations generate adverse effects on economic performance in a variety of developing countries. These effects are evident by output contraction and price inflation. This present study is in consonance with Obokoh et al. (2017), on the impact of exchange rate depreciation on the performance and development of manufacturing SMEs in Nigeria. The results of the data analysis suggest a very high sensitivity of SMEs' performance and cost of operations to exchange rate fluctuations. In which the results further suggest that SMEs' efficiency did not improve; neither were they able to take advantage of the liberalized trade to export their products. The policy did not positively affect Nigeria's non-oil export. Considering Nigeria's re-basing of its GDP and in effect becoming Africa's largest economy, there is a real interest in understanding how fluctuations in exchange rates impact on SMEs activities which account for a substantial part of Nigeria's economic activities.

The long run intercept-C, was found to be -16763040; this is the value of SMEs output if all the explanatory variables were at the value of zero. The long run equation is therefore stated below:

$$\text{SMEs OT} = -16763040 - 1047866.3582 \text{ LOGSMEs OT} - 2296128.0561 \text{ LOGOPT} - 524895.2718 \text{ LOGEXT} + 788128.6949 \text{ LOGIMT} - 94950.8884 \text{ LOGEXR}$$

Table 5: ARDL Error Correction Regression

ECM Regression				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(SMES_OUTPUT(t))	0.936415	0.141595	6.613316	0.0000
D(LOGSMES_OUTPU T)	1251747.	76676.67	16.32500	0.0000
D(LOGSMES_OUTPU T(-1))	-1071702.	193467.8	-5.539433	0.0001
D(LOGOPENNESS)	177883.9	458005.5	0.388388	0.7045
D(LOGOPENNESS(t))	2920216.	619529.3	4.713605	0.0005
D(LOGEXPORT)	-1288426.	207991.5	-6.194610	0.0000
D(LOGEXPORT(t))	-740579.7	239758.0	-3.088863	0.0094
D(LOGEXCHANGE_R ATE)	2358721.	530310.2	4.447814	0.0008
D(LOGEXCHANGE_R ATE(-1))	1699730.	545779.1	3.114319	0.0089
ECM(-1)	-0.662554	0.089538	-8.771595	0.0000

Source: Authors Computation using Eviews 10

The Error Correction Model (ECM) is expected to meet three criteria, it must be negative, less than one and significant. Therefore based on the result in Table 5 the ECM has a negative value of -0.662554 which is less than one and has a P-value of 0.0000 which is significant, implies the speed of adjustment from disequilibrium in last period to current period (Narayam & Smyth, 2005). as a result of differencing the variables due to unit root is corrected at a speed of 66.25% as shown by the coefficient of ECM (-1). From the result it can be deduced that the ECM (-1) coefficient is negative and significant at 5% level of significance.

Table 6: Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.840849	Prob. F(4,8)	0.0975
Obs*R-squared	16.43178	Prob. Chi-Square(4)	0.0025

Source: Authors computation using E-views 10

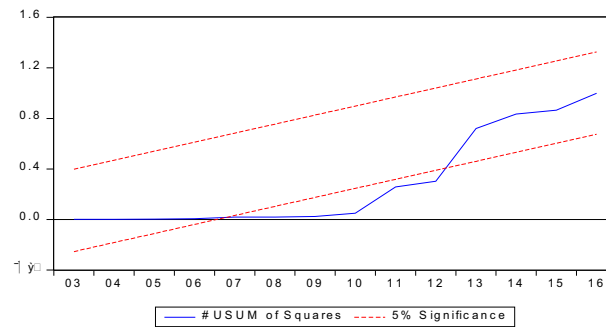
The Breusch-Godfrey serial correlation LM test was used to detect whether the model has autocorrelation problem or not, given the hypothesis as;

H_0 : There is no autocorrelation in the model

H_1 : There is autocorrelation in the model.

The serial correlation result was generated using E-views 10 and it shows that the P-value is 0.0975, which is greater than the level of significance at 0.05. Therefore, the null hypothesis is accepted and conclusion is made that there is no autocorrelation problem in the model.

Figure 1: Stability Test



The test which is based on the CUSUM stability test states that the middle line is expected to be in between the two parallel dotted lines at 5% critical bound which signifies that the variable tested during the period is stable, but if the middle line runs in between the parallel line and later drifted apart in the subsequent year, it is said to be unstable. So, based on the result generated from the stability test in Figure 1, the middle line runs in between the two parallel dotted line from the initial years of 2003-2006 due to the policy adopted by the government which made trade liberalization to have a positive impact on SMEs growth, but in the subsequent years it drifted apart from the period 2007 respectively which is due to the fact that the external sector of Nigeria economy experienced renewed pressure in 2007 due to a fall in the trade surplus. The fall in the trade surplus was the result of Nigeria's lingering problem of dependence on imports even as export revenues dwindle, but in 2013 it became stable.

Test of Hypotheses

Decision Rule

If the p value is greater than the level of significance (0.05) the model fails to reject the null hypothesis. Otherwise reject it.

i.e. if $P > 0.05$, we fail to reject H_0 .

But if $P < 0.05$, we reject H_0 .

Hypothesis I

H_0 : Trade liberalization has no significant impact on SMEs growth in Nigeria.

H_1 : Trade liberalization has significant impact on SMEs growth in Nigeria.

From the result in Table 4, Trade liberalization (Openness) in the long run shows a positive impact on SMEs outputs with coefficient of 2296128 and a p-value of 0.0005. This implies that increase in trade liberalization brings about a significant increase in the output of SMEs in Nigeria. Given that the p-value of trade liberalization is less than the level of significance

of 0.05, (i.e. $0.0005 < 0.05$). Based on the decision rule, reject the null hypothesis and accept the alternate hypothesis, which states that trade liberalization have significant impact on SMEs growth in Nigeria.

Hypothesis II

H_0 : Export has no significant impact on the growth of SMEs outputs.

H_1 : Export has a significant impact on the growth of SMEs outputs.

From the result in Table 4, Export has a positive impact with a coefficient of -52489.3 and a p-value of 0.0850 which is greater than the critical value of 0.05, ($0.0850 > 0.05$) fail to reject the null hypothesis; this implies that an increase in export will bring about a significant increase in SMEs growth. Therefore, export has no significant impact on the growth of SMEs outputs. The implication of the result is that there would be a decline in the growth of the SMEs output which would lead to an adverse effect on the economy.

Hypothesis III

H_0 : There is no significant impact of exchange rate on SMEs output in Nigeria.

H_1 : There is significant impact of exchange rate on SMEs output in Nigeria.

Based on the result in table 4, exchange rate has a coefficient of 1699730 and a p-value of 0.0527 in the short run which is greater than the critical value of 0.05 ($0.0527 > 0.05$) and in the long run it has a coefficient of -94950.89 and a p-value of $0.0280 < 0.05$ Based on the decision rule we reject the null hypothesis in the long run and other wise accept the alternate hypothesis which state that There is a significant impact of exchange rate on SMEs output in Nigeria. Furthermore, exchange rate with a negative coefficient of -88301.19 implies that the level at which exchange rate has affected SMEs growth is relatively high. Therefore as exchange rate reduces SMEs growth increases.

Hypothesis IV

H_0 : Import does not significantly affect the growth of SMEs.

H_1 : Import significantly affects the growth of SMEs.

Based on the result in Table 4, import in the long run has a coefficient of 7881287 and a p-value of 0.0127 which is less than the critical value of 0.05, this implies that import has a positive effect on SMEs growth and is significant. Therefore we fail to reject the null hypothesis and accept the alternate which states that Import has significantly affect the growth of SMEs.

Conclusion and Recommendations

Based on the outcome of the study it is pertinent to stress the significance of liberalization as a strategy for diversification of the Nigeria economy, especially now that the country desires to diversify its economy, in other to achieve economic growth, employment generation and increase national income. Therefore, the government needs to revamp the SMEs subsector. The result of the study shows that SMEs through trade liberalization if properly and

efficiently carried out can lead to the growth of SMEs in Nigeria, as the research work seeks to examine the impact of trade liberalization on SMEs growth in Nigeria. However, in the course of the study it was discovered that liberalization alone cannot result in growth in the SMEs as the SMEs sector are facing numerous challenges such as access to financial support, poor technology base and frequent changes in government's policies exist in the sector among others as enumerated earlier in the study. But despite this, it will be appropriate to conclude that, given the current ailing economic situation in Nigeria, trade liberalization is a veritable policy tool through which the SMEs can grow and perhaps will also lead to the growth of the Nigeria economy as a whole. Based on the empirical findings of this study, and in line with the above conclusions the following recommendations are put forward for policy action.

1. The government therefore needs to induce the foreign exchange rate by enacting positive economic reforms that will minimize the unfavourable effect of fluctuation of exchange rate on the economy with respect to trade flows that will enhance competition, improve business activities, encourage entrepreneurship spirit and also improve the growth of SMEs across the country.
2. Government should make effort to drastically reduce the uncertainty i.e security challenges, and unpredictability of the trade policy regime as its serve as disincentive to investment in Nigerian economy. It is expected that the federal government should enact favourable fiscal and monetary policies this will encourage foreign investors that want to invest in the economy as this would encourage infant industries to produce capital goods for exportation.
3. Small and medium scale enterprises in Nigeria should be encouraged by government by giving incentives and subsidies to SMEs and improving the technological and infrastructural development so as to increase the sectors contribution to GDP, exportation of its manufactured product and employment in the country.
4. Government should ensure that the economy is open to the extent that would have greater impact on the growth of SMEs. Importation of more capital goods should be encouraged from countries who are technologically more advance than Nigeria as this would increase the productive level of the SMEs perhaps increase in its outputs to a larger extent and accelerate the growth of SMEs. This will further increase the sectors contribution to GDP,

References

- Abonyi, J. N. (2008). Assessment of challenges facing small and medium scale enterprises in Nigeria. *Journal of Business, Finance and Management*, 125
- Adebiyi, M. A. (2006). *Trade liberalizations policy and industrial growth performance in Nigeria: An Error Correction Mechanism (ECM) Technique*. www.google.com.ng.
- Adenikinju A. F. & Chete L. N. (2002). Productivity, market Structure and trade liberalization in Nigeria. African Economic Research Consortium (AERC) // Research Paper. *African Economics Research Center, Nairobi*, 126.
- Alarape, A. A. (2008). Entrepreneurship programs, operational efficiency and growth of small and businesses. *Journal of Enterprising Communities: People and Places in the Global Economy*, 1 (3), 222-239
- Babajide, A. A. Lawal, A.I. & Somoye, R.O. (2016). Macroeconomic behaviour and FDI inflows in Nigeria: an application of the ARDL model. *British Journal of Economics, Finance and Management Sciences*, 11 (1), 84-107.
- Bongsha, B. (2011). Some effects of trade liberalization on Cameroonian manufacturing export Performance *studia Universitas* 59, 3-24.
- Nigeria Bureau of Statistic(NBS), (2015). *Annual report of Nigerias trade*.
- Bzuneh. M & Ylheyi. Z (2009). Has trade liberalization improved food availability in the developing Countries' An Empirical Analysis'. Paper Delivered at the *International Association of Agricultural Economists. Beijing, China*
- Central Bank of Nigeria (CBN), (2002). *Annual report and financial statement*.
- Central Bank of Nigeria (CBN), (2004). *Annual report*.
- Central Bank of Nigeria, (CBN) (2016). *Statistical bulletin*.
- Clemence, R.V. (2009). *Essays on entrepreneurship, innovations, business cycles and the evolution of the capitalism*, Transaction Publishers, New Brunswick, New Jersey,
- Emmanuel, J. N. (2017). *Impact of trade liberalization on Nigeria economic growth*. Educacinfo.
- Engle, R. F. & Granger, C. J. (1987). Cointegration and error-correction-representation, estimation and testing. *Econometrica*, 55, 251-278.

- Greenaway D. (1998). Does trade liberalization promote economic development?, *Scottish Journal of Political Economy*, 3 (45), 491-493.
- Gregory, A.W. & Hansen, B. E. (1996). Tests for cointegration in models with regime and trend shifts. *Oxford Bulletin of Economics and Statistics*, 58, 555-560.
- Jhingan, M. L. (2006). *Money, banking international trade and public finance*. Delhi: Vrinda Publications (P) LTD.
- Johansen, S. (1991). Estimation and hypothesis testing of Co-integration Vector in Gaussian Vector Autoregressive Model. *Econometrica* 59, 1551-1580.
- Johansen, S. & Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration with application to the demand for money. *Oxford Bulletin of Economics and Statistics*, 52, pp. 169 – 210.
- Johansen, S. (1991). Estimation and hypothesis testing of co-integration vectors in Gaussian vector autoregressive models. *Econometrica*, 59, 1551 – 1580
- Kandil, M. (2004). Exchange rate fluctuation and economic activity in developing countries Theory and evidence. *Journal of Economic Development*, 29 (1), 85-108.
- Khattry, B. (2003). *Trade liberalisation and the fiscal squeeze: Implications for public investment, development and change*, 34, 401-424.
- MSMES, (2012) Annual micro, small and medium enterprises. *Finance Conference and Workshop on Microfinance for Small and Medium Enterprises*
- Narayam, P. K., & Smith, R. (2005). A panel co-integration analysis of the Demand for Oil in the Middle East. *Energy Policy*, 35, (12), 6258-6265
- Obokoh, L. O. (2008). Small and medium sized enterprises development under trade Liberalization, A survey of Nigeria experience. *International Journal of Business and Management*, 3, 95-101
- Obokoh, L. O (2014). Small and medium sized enterprises development under trade Liberalization, A survey of Nigeria experience. *International Business Research*
- Obokoh, L. O., Ojiako U., Unam J., Ehiobuche C., & Monday, C. (2017). The impact of Exchange rate depreciation on the performance and development of manufacturing small and medium sized enterprises (SMEs) in Nigeria. *African Journal of Business and Economic Research*, 12 (1), 11-48.

- Pesaran, M. H, Persaran, B., Shin, Y., Smith, R. J., (2001). Bounds testing approaches to the analysis of level relationship. *Journal of Applied Econometrics*, 16, 289-326.
- Pesaran, M. & Pesaran, B. (1997). *Microfit 4.0 (windows version)*. New York: Oxford University Press Inc.
- Pesaran, M. H., & Shin, Y. (1990). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16, 289-326.
- Sanjo, O. I. & Ibrahim M., O. (2017). The effect of international business on SMEs growth in Nigeria. *Journal of Competitiveness*, 9 (3), 67-80
- Tambunam, T. (2008). Trade liberalization effects on the development of small and medium-sized enterprises in Indonesia. *Asia-Pacific Development Journal, United Nations Economic and Social Commissions for Asia and Pacific (ESCAP)*, 15 (2), 35-59
- World Trade Organization (2013). *The case for open trade*. Retrieve from http://www.wto.org/english/thewto_ewhatis_e/tif_e/fact3e retrieved on 21st December, 2017.
- World Bank. (2012). Financial Development in Latin America and the Caribbean: the road ahead. *Online Document*. Available at: <https://openknowledge.worldbank.org/handle/10986/2380> Accessed in: 2018, march 22.

APPENDIX

Table 7: Values of Small and Medium scale output(SMEsOT), Export(EXT), Import (IMT), Exchange rate(EXT) and Openness of the economy(OPT).

YEAR	SMEs Output in Billion ₦	Export in Billion ₦	Import in Billion ₦	Real exchange Rate N/US\$1.00	OPENNESS in Index
1986	0.00	9047.46	5970.86	2.0206	0.073603425
1987	14656.2	29578.1	15645.3	4.0179	0.193634453
1988	16833.5	31192.56	17642.62	4.5367	0.16420641
1989	22625.3	59876.89	25179.17	7.3916	0.212072438
1990	25345.3	109681.57	34704.68	8.0378	0.311401258
1991	34762.5	124660.77	69981.88	9.9095	0.354000302
1992	36548.4	205613.1	152901.57	17.2984	0.383379566
1993	38987.7	189777.72	181924.08	22.0511	0.305304597
1994	62857.7	103424.52	98747.85	21.8861	0.209267823
1995	105289.6	567211.03	254701.64	21.8861	0.589181818
1996	132897.1	801752.05	375193.95	21.8861	0.495378164
1997	144107	785472.7	447725.25	21.8861	0.507680556
1998	141496.4	483193.58	405587.53	21.886	0.346328943
1999	150946.5	15559299.52	406961.42	92.3428	0.386538583
2000	5801760	2745102.2	591325.59	100.802	0.424894156
2001	30166.01	1979337.66	885114.07	111.701	0.396624509
2002	92055.75	2167412.42	1054075.62	126.2577	0.28740093
2003	48851.62	3109288.43	1923098.79	134.0378	0.388533408
2004	55290	5137698.43	1575563.85	132.3704	0.38044499
2005	3658173	5137695.68	1779601.58	130.6016	0.451163449
2006	3592804	7555141.32	2922248.46	128.2796	0.364002141
2007	4090919	6881501.33	4127689.93	125.88	0.370409384
2008	4308818	9568949.2	3299096.7	118.86	0.40811449
2009	5763630	8251670.47	5047868.7	148.73	0.318094653
2010	6216947	13004198.26	6648525.9	149.17	0.369431671
2011	80654.31	19423030.79	9892644.2	152.4994	0.416520079
2012	3148800	22444021.12	5624870.4	155.77	0.347295124
2013	316472.5	14245271.58	7015814.9	155.74	0.308410656
2014	8975674	16304041.03	7374370.5	168	0.263907748
2015	9764836	9593041.96	6697965.94	197	0.211602404
2016	6635231.257	8,835.6	9,480.4	253.49	0.180471676

Source: Central Bank of Nigeria (CBN) Statistical Bulletin (2016), Nigeria Bureau of Statistics (2015).