

## Impact of Small and Medium Scale Enterprise (SME) on Nigeria's Economy from 1981 to 2017.

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### ABSTRACT

This study examined empirically the Small and Medium Enterprise (SME) and the Nigerian Economy. The study covered the period 1981–2017, using ARDL approach to cointegration. The ARDL result confirmed the existence no long-run relationship between Growth Rate of GDP, Commercial Bank's Credit to SME, SME Output and Lending Rate. Therefore, this study concludes by recommending that; (i) Governments at all levels should encourage the development of SMEs and create an environment conducive to their success (ii) Government should design policies that will keep lending rates at single digits.

Keywords: Small and Medium Enterprise (SME), Growth Rate of GDP, Auto-Regressive Distributive Lag (ARDL), Nigeria.

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### INTRODUCTION

Over the years, Small and Medium Scale Enterprises (SMEs) has continued to emerge as a business term in the international business world. This is as a result of the role the sector is playing as it serves as a catalyst for employment generation, which propels national growth aimed at poverty reduction and economic development [1]. SMEs the world over has the capacity to boast huge employment generation if given the proper environment and support from economic policies. SMEs employ over sixty percent of the work force globally, especially in the advanced world [2]. The everyday needs of Nigerians are products of SMEs; however, the production and supply chain of these products are done with little or no high-tech mechanization. The over-dependence on oil over the decades has made Nigeria to depend largely on oil for exports instead of diversifying the economy to other productive sectors like SMEs and agriculture [3]. The high price of petroleum products in the 90s brought enormous inflow of oil revenues that raised the per capita income in most oil producing countries of which Nigeria is one of such countries. A drastic decline in the international oil price marked a turning point in the drop in real per capita income of these countries that

were over dependent on oil, which resulted in increase in the level of poverty in some of these countries, especially in Nigeria [4]. Because of the increase in the population of unemployed graduate in Nigeria, Nigeria as a nation started shifting her efforts towards SMEs to see if the increase in the unemployment rate could reduce, and if possible reduce poverty significantly [5]. SMEs as a strategy for employment generation in the context of this paper and in its elementary term means reaching an acceptable standard of employment generation for citizens to be able and willing to afford the basic necessities of life [6]. Major world powers depend on SMEs to grow their economies. For example, in the United State and the United Kingdom, SMEs account for over eighty percent of the country's workforce. Same is true of China, Germany and France. SMEs in these countries employ over seventy-five percent of its workforces [7]. Nigeria is currently witnessing an alarming rate of unemployment rate, which seems to be growing in geometric progression. The main purpose of this study is to try to identify the impact of small and medium scale enterprise (SME) on the Nigerian Economy.

### Conceptual Framework

Small and medium-sized enterprises (SMEs) is a concept that broadly describes the sizes of businesses in an economy. The meaning is determined by the purpose; a definition is expected to support a specific policy governing the

#### The Roles of Small and Medium Enterprises in Economic Growth

The importance of SMEs in developing countries, such as Nigeria, has been established. Such industries make

#### Increasing Capacity

SMEs serve as a training ground for indigenous entrepreneurs, propelling the wealth creation process at all levels. It has even been established that SMEs are a breeding ground for entrepreneurship,

#### Creation of Employment

Because their mode of operation is more labor intensive, SMEs have the potential to generate employment. Their labor-intensive nature is far greater than that of large corporations. It has also been observed that SMEs create more jobs per

#### Boosting Growth

Similarly, by definition, SMEs are involved in primary and secondary economic activities that rely heavily on locally sourced materials. As a result, they

#### Industrial Spreading

SMEs can easily be located in rural areas because they can survive on rudimentary industrial infrastructure. As a result, they serve as major facilitators for industrial

#### Empirical Literature Review

[1] reviewed specific financing options available to SMEs in Nigeria, as well as their contribution to economic growth at the investment level. To determine the relationship between SMEs financing and investment level, the Spearman's Rho correlation test was used. The analysis revealed a significant Rho value of 0.643 at 10%, indicating that there is a significant positive relationship between SMEs financing and economic growth in Nigeria at the level of investment [2]. Investigated the importance of small and medium-sized businesses in creating jobs and reducing poverty in Nigeria Following a thorough review of the literature, the authors concluded that the SME sector is the primary driving force behind job creation, poverty reduction, wealth

sector. However, countries use three major factors in the classification and definition of enterprises. These include capital investments in plant and machinery, the number of employees, and the volume of production [8].

significant contributions to a country's economic growth and development in the following areas:

with individual creativity and innovation serving as the driving force. As a result, they may serve as the university where the vast majority of entrepreneurs receive their training.

unit of investment capital and per unit of energy consumed than large scale enterprises around the world [3]. As a result, they have aided in the resolution of many countries' unemployment problems.

achieve high value-added operations, which play an important role in any economy's growth and development.

spreading and rural development, and have the potential to stem rural-urban conjugation.

creation, income distribution, and income disparity reduction. [4] used two primary data instruments (questionnaires and interviews) to collect information on the impact of small and medium-sized enterprises on job creation in Lagos State, Nigeria. Two different statistical methods were used (simple percentage and chi-square). The findings indicate that SMEs and the long-term development of the Nigerian economy are linked, just as promotion of SMEs and increased job creation are. Abdul-kemi, (2014) in his study Entrepreneurship Development Program and Facilitation of Youth Employment in Kano State, Nigeria using Ordinary least square his study found that Entrepreneurship Development Programmes in Kano State lack capacity to

support the establishment of entrepreneurial ventures and to produce the desired level of jobs for youth. [6] used a descriptive approach to investigate the job creation and employment capacities of SMEs in relation to the business environment in Lagos State. Taking ten elements of the business environment and two indices of SMEs' relevance into account, the study discovered that inadequate access to

finance, competitive pressures, multiple taxes and other fees, and corrupt practices were among the factors working against SMEs, while socio-cultural elements availability and labor service costs did not constrain the enterprises. Despite the constraints, SMEs created jobs and expanded employment in the state, contributing to national employment and output.

**METHODOLOGY**

The methodology employed in this study is the ARDL approach to cointegration developed by [5]. The main purpose of this study is to try to identify the impact of small and medium scale enterprise

(SME) on the Nigerian Economy. This section consists of the research methodology which throws more light into the empirical inquiry conducted.

**Model Specification**

To provide an empirical insight into impact of small and medium scale enterprise (SME) on the Nigerian Economy a modified model used by (Aremu and Adeyemi, 2011) is presented below.

SMEQ = SMEs output proxy by Wholesale and Retail Trade output as a component of gross domestic product (GDP);

$$GRGDP = \beta_0 + \beta_1 SMEQ + \beta_2 CSME + \beta_3 LR + \beta_4 INF + \mu \dots \dots \dots (1)$$

CBSME = commercial bank's credit to SMEs;

LR = Lending rate

INF = Inflation;

Where:

The ARDL bounds testing approach to cointegration is based on the following error-correction model:

GRGDP = growth rate of gross domestic product;

$$\begin{aligned} \Delta GRGDP_t = & \phi_0 + \phi_1 GRGDP_{t-1} + \phi_2 SMEQ_{t-1} + \phi_3 CSMEQ_{t-1} + \phi_4 LR_{t-1} + \phi_5 INF_{t-1} \\ & + \sum_{i=1}^m \beta_{1i} \Delta GRGDP_{t-1} + \sum_{i=0}^m \beta_{2i} \Delta SMEQ_{t-1} + \sum_{i=0}^m \beta_{3i} \Delta CSMEQ_{t-1} \\ & + \sum_{i=0}^m \beta_{4i} \Delta LR_{t-1} + \sum_{i=0}^m \beta_{7i} \Delta INF_{t-1} + E_t \dots \dots \dots (3.2) \end{aligned}$$

**Estimation Procedure**

The estimation begins with Augmented - Dickey fuller (ADF) unit root test to confirm the stationarity states of the

variables and the short and long-run dynamics of the variables are estimated using ARDL

**EMPIRICAL RESULTS AND DISCUSSION**

**Unit root test**

Table 1; Result of Unit Root Test

VARIABLES	CRITICAL VALUES 5%	ADF T-STATISTIC	ORDER OF STATIONARY	REMARK
GRGDP	-2.948404	-3.956034	1(0)	Stationary
SMEQ	-2.957110	-11.29745	1(1)	Stationary
CBSME	-2.951125	-3.832205	1(1)	Stationary
LR	-2.948404	-2.926116	1(1)	Stationary
INF	-2.951125	-5.233570	1(1)	Stationary

Source: Author's Analysis

Table 1 presents the result of stationarity test using the Augmented Dickey-Fuller test of stationarity. The result indicated

that the growth rate of GDP (GRGDP) is integrated of order I(0) at 5 % level of significance meaning stationarity at level,

while SMEQ, CBSME, LR and INF were stationary after the first difference that is

I(1). The null hypothesis of non-stationary is rejected.

ARDL Bounds Test and Short Run Error correction form

ARDL Error Correction Regression

Dependent Variable: D(GRGDP)

Selected Model: ARDL(2, 1, 1, 1, 1)

Case 2: Restricted Constant and No Trend

Sample: 1981 2017

Included observations: 34

ECM Regression				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GRGDP(-1))	-0.376893	0.134889	-2.794092	0.0103
D(CBSME)	0.000297	0.000912	0.326103	0.7473
D(SMEQ)	0.001603	0.008688	0.184540	0.8552
D(LR)	0.172311	0.135262	1.273907	0.2154
D(INF)	-0.149264	0.055307	-2.698835	0.0128
ECM(-1)*	-0.446739	0.131009	-3.409977	0.0024
R-squared	0.541034	Mean dependent var	0.152545	
Adjusted R-squared	0.459076	S.D. dependent var	4.929940	
S.E. of regression	3.625848	Akaike info criterion	5.572839	
Sum squared resid	368.1098	Schwarz criterion	5.842197	
Log likelihood	-88.73826	Hannan-Quinn criter.	5.664698	
Durbin-Watson stat	2.054238			

\* p-value incompatible with t-Bounds distribution.

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	1.591921	10%	2.2	3.09
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: Author's Analysis

Cointegration Test: From Table 2 above, the calculated F-statistic of the variables is 1.591921 and is lower than the upper bound critical value of 3.49 at the 5% level of significance using restricted intercept and no trend. This implies that the null hypothesis of no cointegration cannot be rejected at the 5% level of significance, and this therefore confirms the existence of no long-run relationship among the variables of interest. We then conclude

that there is no long-run relationship between SME and the Nigerian Economy.

The parsimonious error correction model (ECM) result presented in table 4 above is based on the ARDL (2, 1, 1, 1, 1) model. From the result, the coefficient of SMEs output (0.001603) is statistically insignificant. This means that the output recorded by SMEs cannot drive the economy of Nigeria. There is no adequate environment for SMEs to thrive. These

factors ranges from generating electricity, registering the business, getting credit, paying high taxes and labor market regulation. This result is similar with Nigeria's position of 169th out of 190 countries in the World Bank Ease of Doing Business report for 2017. The coefficient of commercial bank's credit to SMEs (0.000297) is statistically insignificant. This implies that SMEs do not get adequate credit from commercial banks. The process of getting credit facilities by SMEs should be reviewed. Lending rate was also found to be statistically insignificant, meaning that SMEs find it difficult in borrowing from Banks. And from our finding Inflation was negative and statistically significant. The statistical fitness of the model was confirmed by the Adjusted R-squared which stood at

0.459076. This means that 45.90% of the variation in GRGDP is explained by the combined effects of all the explanatory variables used during the period of study. This suggests that about 54.6 percent of variation in GRGDP is accounted for by factors not captured in the model. The result also shows that the ECT (-1) is negative and significant. The significance of ECT is evidence that causality runs in at least one direction. The ECT (-1) of -0.446739 is the speed of adjustment from the short-run equilibrium to the long-run equilibrium. This suggest that in a situation of short-run disequilibrium or deviation, 44.6739 percent of the adjustment to the long-run takes place within one period either by market mechanism, government intervention or both of them.

Diagnostic Tests

The model was checked for autocorrelation using the Breusch-Godfrey Serial Correlation LM Test which is shown in table 3 below.

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.534542	Prob. F(2,23)	0.5930
Obs*R-squared	1.510188	Prob. Chi-Square(2)	0.4700

Source: Author's Analysis

The table above presents the result of the Breusch-Godfrey test for autocorrelation. From the value of the prob. Chi-Square of 0.4700, we cannot reject the null-

hypothesis of no auto correlation which is desirable in the model. This therefore indicates the absence of autocorrelation in the model.

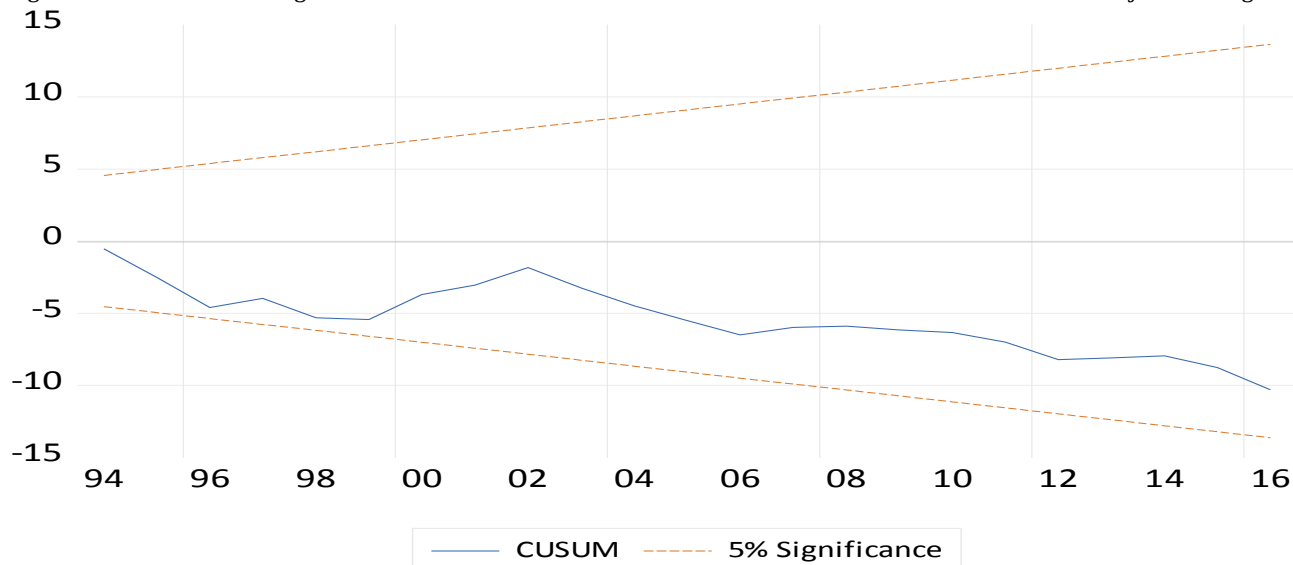
Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.807731	Prob. F(8,25)	0.1230
Obs*R-squared	12.46021	Prob. Chi-Square(8)	0.1318
Scaled explained SS	8.343620	Prob. Chi-Square(8)	0.4006

Source: Author's Analysis

The model was also checked for heteroskedasticity using Breusch-Pagan-Godfrey test. From the above table, the value of the prob. Chi-Square of 0.4006, we cannot reject the null-hypothesis of no heteroskedasticity which is desirable in

the model. This therefore indicates the absence of heteroskedasticity in the model. Furthermore, the model was subjected to a stability test using the CUSUM test which result is shown in figure 1 below.



Source: Author's Analysis

Figure 1, above shows the outcome of the CUSUM test of stability which indicates that the model is stable, given that the

CUSUM line is within the 5% significance boundary.

#### CONCLUSION AND RECOMMENDATIONS

This study investigated the impact of Small and Medium Scale enterprise (SME) on Nigeria's Economy from 1981 to 2017. The empirical findings from the Autoregressive Distributed lag (ARDL) model, revealed that SMEs cannot drive the economy of Nigeria, SMEs do not get adequate credit from commercial banks, that SMEs find it difficult in borrowing from Banks and there is no long run relationship between Small and Medium Scale enterprise (SME) and the Nigerian Economy.

The following insightful recommendations are given below.

- ✓ Governments at all levels should encourage the development of SMEs and create an environment conducive to their success. So that

there will be less difficulty in doing business in Nigeria.

- ✓ Commercial banks should package loan products designed specifically for SMEs, so that lending rates will be lower at most single digit, longer repayment terms should also be factored in and less collaterals should be demanded from SMEs for the to get credit facilities.
- ✓ To avoid mismanagement of the investors' fund, adequate monitoring of the entrepreneurs who borrowed money from the bank should be in place. This will encourage the use of equity financing for productive purposes.

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