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SMALL AND
MEDIUM SCALE
ENTERPRISES
AND INCLUSIVE
GROWTH IN NIGERIA

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Abstract

The roles Small and Medium Scale Enterprises play in the development and growth of any economy cannot be over emphasised. In the past, it has always been said that enough funds given to SMEs in Nigeria hasn't always been enough to drive growth in the sector. Even the ones given are not properly managed to achieve the desired result.

Against this backdrop, this paper analyses the impact of SMEs financing and inclusive growth in Nigeria from 1990 to 2016 adopting the ARDL model and the Error correction model. The findings in this paper revealed that SME financing had significant but negative contributions to growth in Nigeria within the study period. Interest rate and financial deepening significantly contributed to growth negatively, while the past two periods of growth registered a positive impact on current inclusive growth in Nigeria.

Based on these findings, we recommended policies that will improve upon the measures taken to give these loans and suggest that low interest rates and proper supervision should be given to SMEs in Nigeria.

Keywords: SME financing, inclusive growth, ARDL



Introduction

The contribution of small-medium enterprises (SMEs) to development in any economy cannot be over-emphasized, as it has become a veritable tool for fostering entrepreneurial capitalism in emerging countries of the world.

According to OECD (2017), formal small-medium enterprises account for about 60 per cent of total employment in developing economies and about 40 per cent of gross domestic product in emerging countries. However, there are tendencies that these percentages might significantly increase if the contribution of the informal SMEs is considered.

In recently years, many emerging and developing countries have started leveraging the advantage of SMEs to improve their economy. For instance, as surveyed by world bank group reports, stylized fact on the contribution of SMEs as a percentage of GDP in India, South Africa, Brazil, and Turkey revealed 20 per cent, 57 per cent, 72 per cent and 60 per cent respectively, also in the same vein, SMEs as a per cent of employment for these countries were 40 per cent, 61 per cent, 60 per cent and 70 per cent; there is also significantly high SME participation as a per cent of firms (Harwood & Konidaris, 2015).

In Nigeria, however, 96 per cent of businesses are SMEs, with about 90 per cent skewed towards the manufacturing/industrial sector (IFC, 2017); despite this fact, they contribute just 1 per cent to national income.

In Nigeria, it is a conventional truth that there is need to provide adequate foundations for improving business environment in quantum leaps, simultaneously setting up the ground for broad based growth; hence, policy makers need to resolve constraints that constitute bottlenecks to free market and growth of SMEs.

Extrapolating from the above, these constraints could be infrastructural, ranging from debilitating power shortages to poor transportation networks. For instance, in African countries especially Nigeria, firms suffer power shortages on more than 150 days-nearly half a year in total (Moghalu, 2013). Despite this fact, small-medium scale businesses cannot afford conduct business accruing generator cost or alternative energy cost; they run business at a high cost which detrimental to their productivity and competitiveness. Furthermore, one of major reason that stands in the way of SMEs is the lack of credit access (the Economist, 2015).

There are a lot of dimensions to this issue especially the concentrated but lack of depth of development agencies/banking sector and absence of other outlets of finance such as venture capital firms to support start-ups and small- medium scale business, the high cost of credit which also a major proxy of access to credit combined with short intervals of loanable funds; lack of depth of micro finance institutions that are supposed to foster financial inclusion; all these inefficiencies occur alongside asymmetric information that exist in the lending market, between SMEs and micro finances (World Bank, 2018b). Hence, in the presence of adverse selection viable SMEs are turned down or denied access to loanable fund.

The complexities inherent in doing business in Nigeria, is another reason why Small and Medium Scale business have been struggling. As observed in World Bank (2018a) review of doing business, Nigeria ranked 144 out of 190 countries; Nigeria has been oscillating around this figure over the years, judging by the fact that it ranked 133 as at 2001. In ranking these countries, dimensions of business regulations were cross-examined before arriving at this score; parameters ranging from number of processing involved in starting up a business, level of bureaucracy, level of bribes/corruption to the cost of security services were taken into considerations.

Against this backdrop, SME financing if done the right way should be capable reducing inequality, poverty and empowering the population through productive employment; hence a broad-based growth fundamental or worldview is required. Thus, in the planning for economic growth, Nigeria can ensure that adequate mechanisms are put in place to leverage on the benefits of entrepreneurial capitalism in the mask of SMES; such mechanisms are required to guarantee inclusive growth.

The high level of poverty, high rate of unemployment and great extent of income/ wealth inequality occurring simultaneously with high economic growth rates in the developing economies of the world have compelled researchers and governments to focus attention on a new approach to bring about inclusive growth (OECD, 2012).

Unfortunately, not much attention has been given to study SME financing/ exchange in relations to inclusive growth by researchers in Nigeria. This paper, hence, focuses on the impact of SME financing and inclusive growth (poverty, economic growth and unemployment) in Nigeria. The research of this paper is organised as follows; review of relevant literature, Section 3 focus on data and methodology and section 4 provides some recommendations for achieving inclusive growth in Nigeria through SME financing.

Review of Relevant Literature

According to European Commission (2003), Small and Medium Scale Enterprise (SME) is an enterprise that employs fewer than 250 persons and has annual turnover not exceeding Euro 50 million, and/or an annual balance sheet total not exceeding Euro 43 million. There are many variations in the definition of SMEs. These variations could arise because a single definition of SME might not be adequate for multiple countries witnessing diverse stages of economic development (Gibson & Van Der Vaart, 2008). Hence small-scale business varies from one country to another; in the case of Nigeria, the definitions tend to vary from one institution to another.

In Nigeria, however, small-medium enterprise is often defined based on a firm's capitalization, number of staffs, sales volume, and cost of asset, amongst other (Aderinwale, 2016). According to Central Bank Monetary guideline, SME was regarded as firms whose annual turnover is less than 6 million naira and capital not exceeding 10 million (Muritala, Awolaja & Yusuf, 2013).

On the other hand, inclusive growth may be a concept that involves equity, equality of opportunities, and protection in markets and employment mechanism. Inclusiveness is tagged as an essential tool for a successful growth strategy (Commission for Growth and Development, 2008). Most often, the concept of inclusive growth is often used as broad-based growth. Broad-based growth implies that growth should be sustained in the long-run and large portion of the labour force in the growth process (Imb & Wacziarg, 2003). Interestingly, the definition above connotes the relevance of structural transformation for economic diversification and competition, including creative destruction of job and firms; and, inclusiveness of the population refers to equality of opportunity in terms of access to markets, resources and unbiased regulatory environment for businesses and individuals.

The theory of change was first conceptualized in 1995. According to Weiss (1995), it is a theory of how and why initiative work. The theory of change is on-going process of reflection to explore change, how it happens and what it really means on a context, sector and or group of people. It is also known as the engine of change; it describes the set of assumptions that explains both min- steps that lead to long term goals and the link between these activities and outcomes of an interventions or programme (Anderson, 2004). This theory is relevant to this study as it can be used to model how small medium enterprises' financing or interventions can be used to achieve inclusive growth.

Muritala Awolaja & Bako (2012) studied the impact of small-medium enterprise on economic growth and development in Nigeria. The authors collected structured questionnaires from five selected local government and analysed using descriptive statistics and correlation analysis to identify the perception of the role of SMEs in Nigeria. The study concluded that failure of SMEs is due to majorly poor management, corruption and lack of financial support. In the same vein, Imoisi, and Ephraim (2015) examined small medium enterprises and economic growth in Nigeria, over a period of 42 years, using ordinary least square, co-integration and error correction model to estimate data collected. The result concluded that positive relationship exists between economic growth and finance available to SMEs.

In a cross-country analysis by Igwe, Amaugo, Ogundana, Egere and Anigbo (2018) investigated the factors affecting the investment, climate, entrepreneurship and small medium enterprises' productivity in Nigeria. The paper considered relationship between entrepreneurship and business environment using data drawn from World Bank enterprise survey. It was found in the study that high rate of population growth requires investment to boost economic activities and address the problem unemployment, low income earning opportunities and poverty.

Data and Methodology

In this paper we intend to investigate the relationship between SME financing and inclusive growth (Economic growth, employment and poverty) in Nigeria. Given our desire to capture the effect of SME financing and inclusive growth in Nigeria, we adopted the Autoregressive distributed lag model, with a study period from 1990 to 2016.

For this purpose, we adopted variables we believe could capture the real impact of the concept analysed in this study. Commercial bank loans to SMEs were used to proxy SME financing, while unemployment, Gross National income per capita used as a proxy to measure poverty within the region. This as a result of the inconsistencies in the poverty data, and thus we believe that GNI per capita can be a good proxy for it. We also introduced financial deepening indicator as a percentage of Money Supply ratio to capture the effect of proximity of these SMEs to have access to financial institutions that provide these loans. GDP per capita is also introduced to capture the effect of Economic growth in the study. All the data in this paper were sourced from the World Development Indicator of 2018 and the CBN statistical bulletin (2016).

To capture the impact of SME financing on Economic growth in Nigeria, we adopted the autoregressive distributed lag (ARDL) modelling approach. The main reason for this lies in the flexibility of this model to handle small sample data and its usefulness when variables are integrated of order $I(0)$ and $I(1)$ but not $I(2)$. The ARDL model is specified below as thus; The regression model will be specified as;

$$\begin{aligned} \Delta GDPpc_t = & \alpha_0 + \sum_{i=1}^n \beta_1 \Delta GDPpc_{t-i} + \sum_{i=1}^n \beta_2 \Delta CBLME_{t-i} + \sum_{i=1}^n \beta_3 \Delta GNIpc_{t-i} \\ & + \sum_{i=1}^n \beta_4 \Delta FINDEP_{t-i} + \sum_{i=1}^n \beta_5 \Delta UNEMP_{t-i} + \sum_{i=1}^n \beta_6 \Delta INTR_{t-i} + \gamma_1 GDPpc_{t-1} \\ & + \gamma_2 CBLME_{t-1} + \gamma_3 GNIpc_{t-1} + \gamma_4 FINDEP_{t-1} + \gamma_5 UNEMP_{t-1} + \gamma_6 INTR_{t-1} \\ & + \varepsilon_t \end{aligned}$$

Where, Δ is the first difference operator, and α_0 is the drift component. The expressions with summation sign (β_1 - β_6) represents the short-run dynamics of the model, while the coefficients (γ_1 - γ_6) represents long-run relationship and ε_t is the serially uncorrelated disturbance with zero mean and constant variance.

To investigate the existence of the long-run relationship among the variables in the system, the bound tests approach is employed. This test is based on Wald or F-statistic and follows a non-standard distribution. If the calculated F-statistics is below the lower bound critical value, the null hypothesis of no cointegration is accepted. If it is greater than the appropriate upper bound critical values, the null hypothesis is rejected implying cointegration. However, if it lies within the lower and upper bounds, the result becomes inconclusive.

Empirical Findings and Discussion

With the ARDL model, there are necessary pre-test estimation that needs to be done so we can be very sure that all conditions are satisfied for the application of the model. The result of these tests is discussed in this section of the paper.

Stationarity, Lag Length, and Bounds Test

In order for us to determine the order of integration of our variables and to be sure that the series are integrated of order I (0) and I(1) but not I(2), a unit root test was carried out using the Augmented Dickey Fuller test (ADF) on these variables. Our result show that all our series, Gross Domestic Product per capita (GDPpc), Gross National Income per capita (GNIpc), Unemployment rate (UNEMP), financial deepening money supply as a ratio (FINDEP), and Commercial Bank Loans to SMEs (CBLsME) were all integrated of order 1, meaning the series were stationary after first difference.

Only INTR was stationary at level form and after first difference (see table 4.1). The decision rule for no unit root is that the ADF test statistic must be greater than the Mackinnon critical value for the series to be stationary. Our result shows that all series were stationary after first difference except interest rate, which was stationary at level.

Table 4.1 Unit Root Test

Variable	ADF Test Statistic	Mackinnon Critical Value @5%	P-value	Order of Integration	Assessment
CBLsME	-5.225024	-2.986225	0.0003	I(1)	Stationary
UNEMP	-4.795047	-2.986225	0.0008	I(1)	Stationary
GDPpc	-3.677872	-2.986225	0.0111	I(1)	Stationary
GNIpc	-4.821498	-2.986225	0.0007	I(1)	Stationary
FINDEP	-4.444579	-2.986225	0.0018	I(1)	Stationary
INTR	-3.463167	-2.986225	0.0176	I(0)	Stationary

Table 4.2 Lag Length Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	51.58572	NA	0.001126	-3.963976	-3.667760	-3.889478
1	52.09770	0.712317	0.001183	-3.921539	-3.575954	-3.834625
2	54.24323	2.798521	0.001082*	-4.021150*	-3.626196*	-3.921820*
3	55.17025	1.128551	0.001104	-4.014805	-3.570481	-3.903058
4	55.47715	0.346923	0.001194	-3.954534	-3.460841	-3.830372

*indicates lag order selected by the criterion

The result of all the information criteria is suggesting a lag order of 2 and thus we will estimate our model using an ARDL model of lag 2.

In our model, we found that there exists a long run relationship among variables of interest suggesting there is cointegration in the model. As a result of this, we had to conduct an error correction model so as to account for the presence of cointegration in the model. The result can be seen in table 4.3 below.

Table 4.3 Error Correction Model

Dependent Variable: LGDPPC

Method: Least Squares

Date: 08/11/18 Time: 09:16

Sample (adjusted): 1994 2016

Included observations: 23 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12.43292	0.056927	218.3993	0.0000
D(LGDPPC(-1))	-2.937374	1.638871	-1.792315	0.1067
D(LGDPPC(-2))	5.656691	2.649312	2.135155	0.0615
D(LCBLSME(-1))	-0.550941	0.162609	-3.388144	0.0080
D(LCBLSME(-2))	-0.433890	0.168416	-2.576306	0.0299
D(LGNIPC(-1))	-0.531163	1.211220	-0.438536	0.6713
D(LGNIPC(-2))	-0.580749	1.428561	-0.406528	0.6939
D(INTR(-1))	-0.088391	0.030815	-2.868425	0.0185
D(INTR(-2))	-0.088802	0.030928	-2.871309	0.0184
D(FINDEP(-1))	-0.045046	0.013072	-3.445921	0.0073
D(FINDEP(-2))	-0.038547	0.012618	-3.054997	0.0137
D(UNEMP(-1))	-0.104530	0.058175	-1.796810	0.1059
D(UNEMP(-2))	-0.045092	0.064599	-0.698037	0.5028
ECM(-2)	-9.198949	2.992222	-3.074287	0.0133

		Mean dependent	12.4882
R-squared	0.808602	var	7
Adjusted R-squared		S.D. dependent	0.29156
	0.532138	var	3
			-
		Akaike info	0.10758
S.E. of regression	0.199430	criterion	3
Sum squared resid			0.58358
	0.357952	Schwarz criterion	7
		Hannan-Quinn	0.06624
Log likelihood	15.23720	criter.	4
		Durbin-Watson	1.39020
F-statistic	2.924803	stat	2

Prob(F-statistic) 0.056258

The result in table 4.3 measures the short run dynamics of the parameters alongside the error correction model. We found that two previous years inclusive growth has a significant positive effect on current inclusive growth in the short run. This means that a 1 percent increase in the growth of previous years leads to an increase in current inclusive growth by 5.656%. It implies that improvements in growth take about two-year period to impact on current growth in Nigeria.

We also discovered that commercial bank loans to SMEs had a significant impact on current inclusive growth, but the effect was negative. This implies that its contributions reduced growth instead of increasing it. This tells us that the loans given to SMEs did not contribute to growth in Nigeria during the study period and it can be attributed to the fact that the loans received by these small-scale firms were not viable enough to register significant increases to inclusive growth in Nigeria. A percentage increase in commercial bank loans to SMEs in the previous year 1 and year 2, led to a decrease in inclusive growth by -0.55% and -0.433% respectively.

We also found interest rates to be statistically significant, but it also contributed to growth negatively in the short run, which is very much expected. In addition, the coefficient of unemployment has a negative effect on growth in the short run but insignificant and thus doesn't impact on inclusive growth in Nigeria.

The Error correction coefficient estimated at -9.198 is highly significant and negative as expected. This implies that the speed of adjustment to the equilibrium is very high and this further confirms the existence of a stable long run relationship among variables of interest.

Table 4.4 Serial Correlation Test

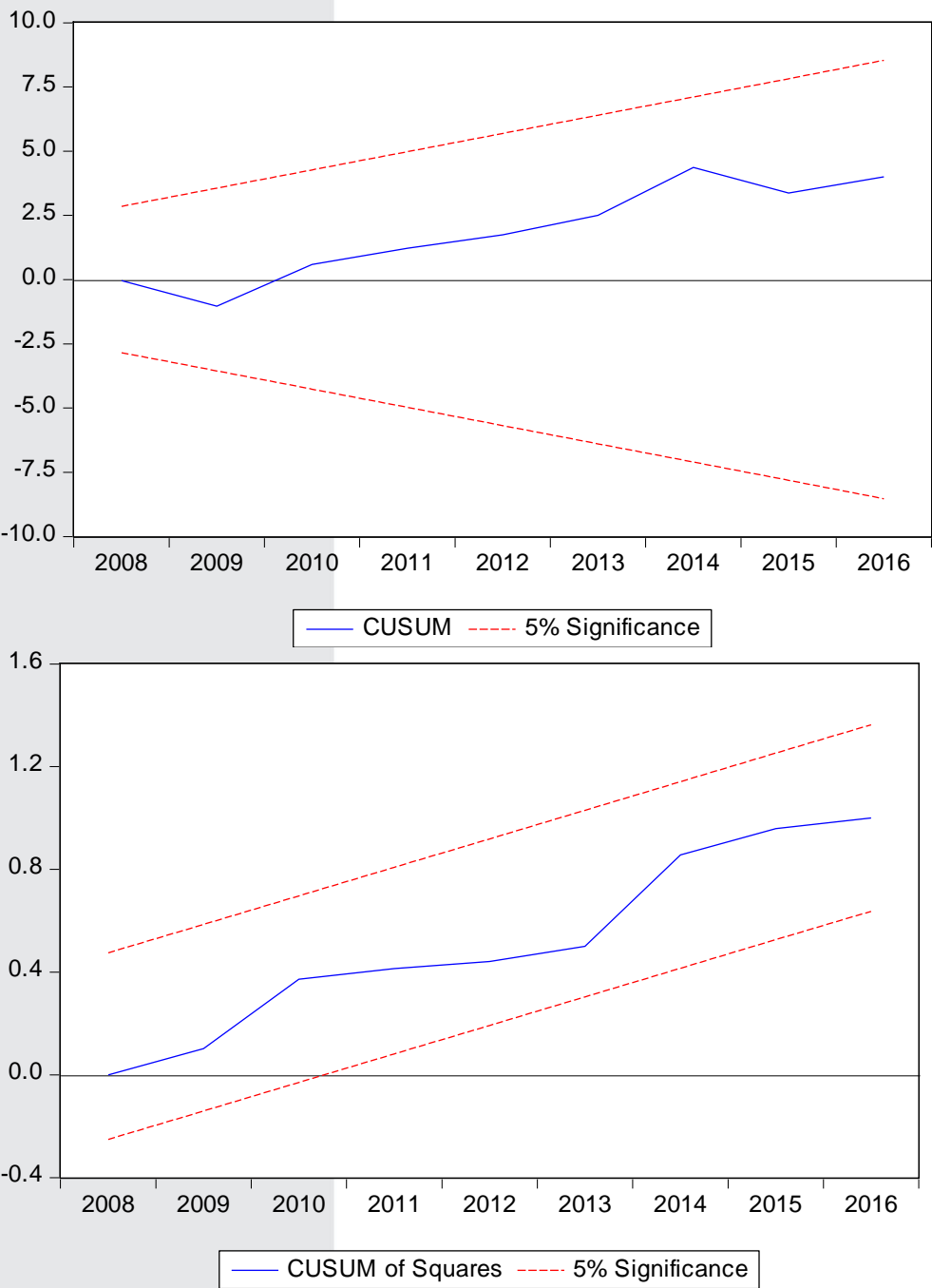
Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.810877	Prob. F(2,7)	0.2324
		Prob. Chi-Square(2)	
Obs*R-squared	7.842429		0.0198

The Breusch-Godfrey test was adopted to test for the presence of serial correlation in the model and it was found that there is no serial correlation in the model. The result shows we fail to reject the null hypothesis of no serial correlation.



Figure 4.1 Stability Test



The results of the stability test shows that the short run model is relatively stable and has passed the entire diagnostic test. The model was stable when both the CUSUM test and CUSUMSQ test was adopted. This suggests that there is no evidence of autocorrelation in the model at the 5% significance level.

Conclusion and Policy Recommendation

This paper was examined to investigate the impact of SME financing and inclusive growth in Nigeria. The ARDL model and Error correction model were applied during the study period of 1990 to 2016 and the result show that there is the presence of cointegration between inclusive growth and commercial loans to SMEs (including other explanatory variables in the model). The Error correction model was also found to be statistically significant, confirming the existence of a long run relationship in the model. We used the information criteria to choose the appropriate lag of the model and the result of our ECM suggests that commercial bank loans to SMEs has a significant impact on inclusive growth in Nigeria, but it contributed negatively to growth. Also, interest rate was seen to be statistically significant but also contributed to growth negatively meaning higher rates of interest will lead to a reduction to growth in Nigeria.

Another variable that was found to be significant was GDPpc, meaning that the last two previous years of growth has a positive and significant impact to inclusive growth in the current period.

Therefore, the policy implication to our finding is that government should set up a viable institutional framework that will supervise the loans given to SMEs, making sure that what these small firms borrow from commercial banks are being invested in their business to yield desired result, so that this can be translated to growth in Nigeria.

Also, government under the auspices of the Central Bank of Nigeria should ensure that any of these small-scale firms that borrow from commercial banks, do so at low interest rates to enable them pay back these loans as at when due without any form of financial pressure.

Furthermore, to maximize the effect of these loans to SMEs, government through development banks should allocate adequate finance aimed at empowering small-scale firms and these loans should be given to firms that truly merit a loan.

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