SMEs Formal Funding, a Lubricant for Economic Performance: The Nigerian Experience

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Authors’ contributions

This work was carried out in collaboration between both authors. Author SSO designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author OCO managed the analyses of the study and also presented the concluding remark. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJEBA/2019/v13i430178

Editor(s):

(1) Associate Professor, Dr. Maria Ciurea, Department of Economic Sciences, Faculty of Sciences, University of Petroșani, Romania.

Reviewers:

(1) Martin Ramirez-Urquidy, Universidad Autónoma de Baja California, México.
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Complete Peer review History: http://www.sdiarticle4.com/review-history/54384

Original Research Article

ABSTRACT

This study examined the relationship between Small and medium scale enterprises formal sources of funding and economic performance of Nigeria, for the period 1992 to 2018. We adopted secondary data that were sourced from the central bank of Nigeria statistical bulletin. We conducted unit root test, Bound co-integration test and auto regressive distributive lag tests. The tests revealed that, in the long run, Microfinance Banks credit is statistically significant in promoting economic performance of Nigeria. While, Bank of Agriculture credit and bank of industry credit were found not to be statistically significant in promoting Nigeria’s economic performance. However, jointly, credits from the banks studied have a positive relationship with the performance of Nigeria’s economy as represented by the GDP. The study therefore recommends that, access to microfinance credit by SMEs should be sustained, while the relevant agencies should work to improve the relationship between credits by Banks of Agriculture and Industry to Small and Medium Enterprises.

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Keywords: SMEs; microfinance banks credit; economic performance; Nigeria.

1. INTRODUCTION

To bring to context our research, we define Small and Medium sized Enterprises (SMEs) as non-subsidiary independent firms, which employ fewer than a given number of employees. This number varies across countries. In Nigeria, SMEs are defined by the Central Bank of Nigeria (CBN) as economically independent companies with about 11 to 300 employees and an annual debt turnover of between N5 million to N500 million. As such, we adopt the CBN definition of SMEs. In ascertaining effective industrialization and proposed economic growth in any nation, small and medium scale firms play a lead role. Small and medium scale enterprises do not only accelerate per capita income and national output of the economy, it also create employment opportunities, enhance regional economic balance through industrial dispersal and generally promote effective resource utilization. SMEs serve as a training ground for developing technical and entrepreneurial skills and by virtue of their greater use of indigenous technological capabilities, they promote local inter-sectorial linkages and contribute to the dynamism and competitiveness of the economy [1].

Globally, SMEs are the major component of the private sector and the oil required to lubricate the engine of the socio-economic transformation of any nation especially a developing one like Nigeria. This statement stems from their grass root role in employment generation, capital accumulation, wealth creation and innovativeness. Sanusi [2] highlighted that SMEs are the main source of entrepreneurship and enterprises and the main source of innovation and technological development that provide the needed human capital and resources for large business.

The enormous and alarming rate of unemployment in the recent decade has ameliorated and contributed significantly to the rate of SMEs practise increase in Nigeria. Over the years, the Nigerian tertiary institutions produce massive number of graduates annually without a corresponding increase in job creation while the number of unemployed youth in the labour market is on the increase. Hence, it becomes sine qua non to support the inclusive funding of SME’s if sustainable level of economic growth is to be achieved [3]. Overtime, it has been reported that funding challenges have been a major impediment against the flourishing of active SMEs in Nigeria hence, series of effort was put in place by the previous government to address SME’s funding in order to reduce the ever teeming unemployment rate and achieve the targeted level of growth in Nigeria.

One of such effort include direct financing and establishment of Agricultural Development Programs like, The Farm Settlement Schemes (FSS) and River Basin Development Authorities (RBDA) between 1950-1960, The Federal Government Development Banks. The Federal Industrial Development Bank (NIDB) in 1964, The Nigerian Agricultural and corportive Bank (NACB) in 1973 and The Nigerian Bank for Commerce and Industry (NBCI) were specifically dedicated to the development of SMEs via provision of soft credit facilities to the farmers and SMEs, the establishment of the People Bank of Nigeria (PBN) in 1997. Establishment of the Nigeria Agricultural Co-operation and Rural Development Bank (NACRDB) by the merger of FEAP, NACB and PBN in 2000, (Small and Medium Scale Enterprises Development Agency of Nigeria (SMEDAN) in 2003 to facilitate the promotion of SMEs) and then the Micro Finance Bank (MFB) scheme on the 16th December, 2005.

In the light of the above, empirical reports has proven that government effort alone is not enough to catapult SMEs operation toward boosting economic performance in Nigeria, hence certain problems are identified. Monogbe et al. [3] reported that overreliance on government intervention has been a major impediment in the effective functioning of SMEs and its contribution to economic growth. Their study further reported that the quantum of fund channeled to SMEs in Nigeria is not sufficient to enhance its significant contribution to economic growth. Further, [4,5] empirically reported that the amount of fund allocated to SMEs by deposit money banks is not sufficient. As such, SMEs contribution to economic growth seems to be minimal. Therefore, these problems facing the funding drive of SMEs in related to performance of the Nigerian economy forms the crux of this study. In an attempt to actualize the objectives of the study, we conceptualized SMEs financing using the various government intervention scheme targeted at promoting SMEs performance in Nigeria and they include, Bank of...
Agriculture credit to SMEs, Bank of Industry credit to SMEs, Microfinance banks credit to SMEs while gross domestic product is used as proxy for economic performance [6].

2. LITERATURE REVIEW

2.1 Theoretical Underpinning

2.1.1 Schumpeterian theory of entrepreneur

As propounded by [7], the theory gave credence to invention and innovation as a function and responsibility of an entrepreneur. The theory further explain that to be an entrepreneur, invention and innovation is required. Innovation is the practical implementation of the new ideas (invention) while invention is the identification of new ideas.

According to Schumpeter [7], invention is the function of an entrepreneurs who are also visionaries that foresee opportunities unknown or unseen by orders. Discovery of this new ideas and techniques leads to competitions and thus command others attention to such line of ideas and business. Hence, the role of financing comes in when the new ideas is about to be implemented. In order words, the practical implementation of this new ideas require funding and that is where the role of finance house set in.

The theory presented that discovery of new ideas and its Implementation becomes a mirage without an effective financing institutions. This implies that for an entrepreneur to successfully achieve and actualize its ideas, funding is a necessity. Finance houses and financial institution therefor play huge role in actualizing the objective of an entrepreneurs through the window of credit creation and easy accessibility to fund. To this end, one can infer that the connection between entrepreneurs and finance houses is capable of boosting economic growth of any nation through the window of job creation. Easy accessibility of fund by the entrepreneur will result into increase in entrepreneurial ideas and thus speed up job creation capacity which will further promote economic development.

The theory further discard the classical and neoclassical economies opinion of gradual and uniformity growth process of an economy. The theory presented that the economy has the capacity of growing at individual pace and independent of another. And for such disharmonize growth to take place, SMEs must be well equipped with new ideas and finances.

2.2 Empirical Review

Ogunbiyi and Monogbe [5] compared the contribution of microfinance bank credit to SMEs and deposit money bank credit to SMEs in Nigeria. In an attempt to actualize the objective of the study, Micro Finance Credits to the Small and Medium Scale Enterprises was proxy for micro finance operation while Deposit Money Banks credit to SME’s was proxy for conventional operation while Real Gross Domestic Product of the nation is used to measure economic growth between the periods 1992 to 2015. The study employed error correction model and granger causality test to examine their direction of causality. The study reported that microfinance institution credit to SMEs have displayed a significance relationship to the current growth trend in the nation’s output. The result further showed that the Microfinance credits have actually achieved their expected aim of contributing to economic output. Hence, the study concluded that the micro finance credit has significantly contributed to economic growth while deposit money bank credit to SMEs is parasitic to economic growth in the Nigerian context. Therefore, the study recommended that the public authorities and relevant monetary institutions should foster the activities of the Microfinance banks while enlarging the purse of the Deposit Money Banks towards funding Small and Medium Scale Enterprise activities.

Monogbe et al. [3] using auto regressive distributed lag investigate SMEs funding in Nigeria using time series data between the time frame 1992 to 2015. The study employed unit root test and auto regressive distributive lag. It was revealed that the insignificant contribution of SMEs to economic development in Nigeria could be attributed to insufficiencies in the amount of fund allocated to the SMEs. As such, this debars its significant contribution to economic development. The study thus recommended that loan allocation scheme should be reviewed such that significant percentage will be allocated to SMEs as this will help spur up the contribution of SMEs to economic development.

Ikechukwu and Torbira [8] investigated leveraging on the Nigeria economic microcredit or conventional using time series data between the periods 1992 to 2014. The gross objective of this study is to ascertain the contributive quota of each of the financial system to the growth of the Nigerian economic. Study employed unit root test, Cointegration test, error correction model
and causality test to justify the causality link between the variables used in the process of research. Finding revealed that the operation of the conventional institution is parasitic to the growth of the economy while the existence of the microcredit institution promoted economic growth to a large extent. Based on this finding, study then recommended that operational tariffs of microcredit firm be reviewed downward to encourage more operational network of microcredit institution.

Nwakanma et al. [9] investigated the effect of bank credit to the private sector and the causality link that exist between them using ARDL technique. Finding revealed that bank credit to the private sector stimulates economic growth in the long run but the result of the granger causality test exert a unilateral nexus between bank credit to the private sector and economic growth with causality flowing from GDP to bank credit to the private sector. Sequel to this, study recommended adequate legal framework to ensure contract enforcement to enhance capacity of bank.

In a more recent study, Akujuobi and Chimaiejem [10] in their empirical findings reported that credit allocated to the agricultural sector significantly contributed to the Nigeria economic growth while credit allocated to fishery/forestry, mining/quarry and real estate and housing is negatively correlated and insignificantly related to economic growth.

Nnamdi and Torbira [11] examine conventional bank credit versus microfinance banks credit. The aim of the study was to identify which of this credit is responsible for economic growth in Nigeria between the periods 1992 to 2014. Augmented Dickey Fuller test, Johansen Cointegration test, Error Correction model and Pair Wise Granger Causality test was employed in the stud. Findings reveal that a long run relationship exist between microcredit and economic growth proxied by Gross Domestic Product and thus concluded that the operation of the conventional banking is parasitic to economic growth while the microcredit operation might hopefully promote the economy in the long run.

Oyedokun [12] examine the extent to which the limited credit allocated towards the small and medium scale enterprise have help in boosting their performance in Nigeria. Emphases was on the south west small enterprises where 153 small and medium scale enterprises were considered after thorough investigation and interview. The study employed a purposive arbitrary testing strategy on the study. The information gathered was broken down utilizing Pearson's correlation. Finding shows that a strong positive relationship exist between advances gotten from smaller scale fund banks (MFBs) and the execution of little and medium scale entrepreneurial firms.

Abdollah [13] investigated the nexus between small and medium scale enterprises in Iran using quarterly data. The author designed a cub Douglas model as the study involve economic growth process. Findings revealed that SMEs operation has significantly spurred economic growth in Iran through job creation and innovation of local technology or economic advancement. The study therefore recommended that an attractive platform should be established to further promote the discovery of new technique by entrepreneurs as this will help in accelerating economic development of the nation.

Alese and Alimi [14] using time series data, analyses the connectivity between small and medium scale enterprises funding and economic growth process in Nigeria. The study covers a period of twenty two years. The study proxies small and medium scale enterprises funding development banks and specialized bank credit to small and medium scale enterprises while gross domestic product was used as a measure for economic growth. The study first test for stationarity among the study variables and further proceed to examine the long run association among the series using johansen co-integration test. Finally, error correction model was introduce to ascertain the percentage of correction coefficient. Findings showed that in the short run, deposit money bank credit does not seem to promote economic growth while in the long run, a bi-directional relationship is identified between SMEs and economic growth. As such, the study advice that more fund be allocated to SMEs as it has the potency of transforming the economy in the long run.

In another related study, Folorunsho et al. [15] investigated the contribution of small and medium scale enterprise in fast-tracking economic growth and development in Nigeria. The study adopted quasi experimental research design where questionnaire were distributed to seventy respondents in Ibadan and its metropolis. Finding revealed that SMEs performance has penetrated the Nigerian
economy by reducing poverty level and enhanced job creation. A significant relationship was recorded between SMEs performance and economic development. Hence, the study concluded that SMEs development is an antidote to unemployment in Nigeria.

3. METHODOLOGY

3.1 Research Design

This research work utilized the Ex-poste Facto Research Design as it undertook the examination of a data-set and looked for potential relations between variables due to unknown direction and strength of the relationship. This study employed secondary data extracted from Nigerian stock exchange market, Index Mundi and Central Bank of Nigeria (CBN) statistical bulletin 2018 issues.

3.2 Operational Measures of Variables

I. **Gross domestic product**: This is the total output level of goods and services product in Nigeria over a period of time usually a years. The data is extracted over the period 1992 to 2018 as reported within the scope of the statistical bulletin.

II. **Bank of agriculture loan**: These are loans and advances channel to SMEs in the areas of farming and agriculture by the Bank of Agriculture.

III. **Bank of industry loan**: This signifies the credits or loans by the Bank of industry to assist activities of SMEs in Nigeria.

IV. **Microfinance banks credit**: This is captured by the micro-financing credit activities as it influences activities of economic. This is the volume of microfinance bank credit that are available to various SMEs in the economy in the form of credit facilities. It is expected that, an increase in the amount of money available to SMEs will spur their output level and performance.

3.3 Model Estimation

**Autoregressive Distributive Lag (ARDL)**: Autoregressive distributive lag (ARDL) mechanism is used in estimating the dynamism among employed variables. Some of the condition for using this estimation tool include, (i) When the number of observation or sample size under consideration is less than 30, (ii) when there is a mixed stationarity response of the time series under investigation that is when series is stationary at 1(1) and 1(0). Autoregressive distributive lag (ARDL) mechanism is appropriate. Since the series for this study meet these two condition, we proceed to employ Autoregressive distributive lag (ARDL) mechanism and it is model below;

\[ y_t = \beta_0 + \beta_1 t + \sum_{i=1}^{m} \phi_i y_{t-i} + \beta_2 x_t + \sum_{i=0}^{p} \beta_i x_{t-i} + \mu_t \]  

Where \( x_t \) represent the dimension of 1(1) variable which are not stationary \( \beta_1 \) represent the matrix which makes autoregressive process stable while \( \mu_t \) is the error term [3]. The ARDL model for this study is incorporated thus;

\[ \Delta GDP_t = a_0 + \sum_{i=1}^{p} a_i GDP_{t-i} + \sum_{i=1}^{p} \alpha_i BOACs_{t-i} + \sum_{i=1}^{p} \beta_i BOICs_{t-i} + \sum_{i=1}^{p} \gamma_i MFBCs_{t-i} + \pi t \]  

On a priori \( a_1, a_2, a_3 > 0 \) (3)

On a priori, we expect a positive relationship between SMEs funding proxies (Bank of Agriculture credit to SMEs, Bank of Industry credit to SMEs, Microfinance banks credit to SMEs) and gross domestic product in Nigeria.

Where:

- GDP = Gross Domestic Product
- BOACs = Bank of agricultural credit to SMEs
- BOICs = Bank of industry credit to SMEs
- MFBCs = Microfinance bank credit to SMEs
- \( a_0 \) = Constant
- \( a_1 - a_3 \) = Estimation parameters
- \( \mu \) = Error term

3.4 Data Presentation

This section present data for the study and all series are presented in billion as extracted from the central bank of Nigeria statistical bulletin.

4. RESULTS

4.1 Unit Root Tests

This test is a stationarity test which is employed to ascertain the level of reliability amongst variables under investigation as time series data are prone to stationarity problems, Gujarati and Porter [16]. For the purpose of this research work, we employed Augmented Unit Root Test and its output is presented in Table 2.
Table 1. RGDP = Real Gross Domestic Product, BOACS = Bank of agriculture credit to SMEs, BOICS = Bank of industry credit to SMEs, MFBCs = Microfinance bank credit to SMEs

<table>
<thead>
<tr>
<th>Years</th>
<th>GDP N' Billion</th>
<th>BOACs N' Billion</th>
<th>BOICs N' Billion</th>
<th>MFBCs N' Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>875.3</td>
<td>93391.8</td>
<td>53</td>
<td>135.8</td>
</tr>
<tr>
<td>1993</td>
<td>1089.7</td>
<td>81273.8</td>
<td>136.7</td>
<td>654.5</td>
</tr>
<tr>
<td>1994</td>
<td>1399.7</td>
<td>106901</td>
<td>90</td>
<td>1220.6</td>
</tr>
<tr>
<td>1995</td>
<td>2907.4</td>
<td>166645.1</td>
<td>127.6</td>
<td>1129.8</td>
</tr>
<tr>
<td>1996</td>
<td>4032.3</td>
<td>227664.5</td>
<td>124.5</td>
<td>1400.2</td>
</tr>
<tr>
<td>1997</td>
<td>4188.3</td>
<td>242028.3</td>
<td>158.6</td>
<td>1618.8</td>
</tr>
<tr>
<td>1998</td>
<td>3989.5</td>
<td>220288.5</td>
<td>178.1</td>
<td>2526.8</td>
</tr>
<tr>
<td>1999</td>
<td>4679.2</td>
<td>214169</td>
<td>449.7</td>
<td>2958.3</td>
</tr>
<tr>
<td>2000</td>
<td>6713.6</td>
<td>361449</td>
<td>579.3</td>
<td>3666.6</td>
</tr>
<tr>
<td>2001</td>
<td>6895.2</td>
<td>728545.4</td>
<td>579.3</td>
<td>1314</td>
</tr>
<tr>
<td>2002</td>
<td>7795.8</td>
<td>1050982.3</td>
<td>696.8</td>
<td>4310.9</td>
</tr>
<tr>
<td>2003</td>
<td>9913.5</td>
<td>1151015</td>
<td>984.3</td>
<td>9954.8</td>
</tr>
<tr>
<td>2004</td>
<td>11411.1</td>
<td>2083744.7</td>
<td>1032.7</td>
<td>11353.8</td>
</tr>
<tr>
<td>2005</td>
<td>14610.9</td>
<td>9493854.5</td>
<td>1223.7</td>
<td>28504.8</td>
</tr>
<tr>
<td>2006</td>
<td>18564.6</td>
<td>4262430.3</td>
<td>1290.2</td>
<td>16450.2</td>
</tr>
<tr>
<td>2007</td>
<td>20657.3</td>
<td>4425461.5</td>
<td>1589.3</td>
<td>22850.2</td>
</tr>
<tr>
<td>2008</td>
<td>24296.3</td>
<td>6497958.9</td>
<td>2117.4</td>
<td>42753.1</td>
</tr>
<tr>
<td>2009</td>
<td>24794.2</td>
<td>3017286.8</td>
<td>2128</td>
<td>58215.7</td>
</tr>
<tr>
<td>2010</td>
<td>33984.8</td>
<td>7840496.6</td>
<td>3109.4</td>
<td>52867.5</td>
</tr>
<tr>
<td>2011</td>
<td>37409.9</td>
<td>10029488.8</td>
<td>3314.5</td>
<td>50928.3</td>
</tr>
<tr>
<td>2012</td>
<td>40544.1</td>
<td>9332484.2</td>
<td>3325.2</td>
<td>80127.9</td>
</tr>
<tr>
<td>2013</td>
<td>42396.8</td>
<td>6497958.9</td>
<td>3689.1</td>
<td>94055.6</td>
</tr>
<tr>
<td>2014</td>
<td>47134.7</td>
<td>8328565.8</td>
<td>3417.6</td>
<td>82421.1</td>
</tr>
<tr>
<td>2015</td>
<td>94145</td>
<td>8830484.4</td>
<td>3668.4</td>
<td>149325.5</td>
</tr>
<tr>
<td>2016</td>
<td>74281.7</td>
<td>9535386.6</td>
<td>4225</td>
<td>130714.3</td>
</tr>
<tr>
<td>2017</td>
<td>81018.9</td>
<td>9884431.4</td>
<td>4484.3</td>
<td>142778.4</td>
</tr>
<tr>
<td>2018</td>
<td>82670.7</td>
<td>9436428.521</td>
<td>4806.9</td>
<td>163487.9</td>
</tr>
</tbody>
</table>

Source: Extraction from CBN Statistical Bulletin 2018 various issue, International Financial Statistics and Index mundi

Table 2. ADF unit root test results

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF-statistic</th>
<th>Test critical values</th>
<th>Order of integration</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(RGDP)</td>
<td>-3.473293</td>
<td>1% level = -3.26616</td>
<td>I(1)</td>
<td>0.0155</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5% level = -2.957158</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10% level = -2.617867</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D(BOACs)</td>
<td>-5.593023</td>
<td>1% level = -3.737853</td>
<td>I(0)</td>
<td>0.0002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5% level = -2.991878</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10% level = -2.635542</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D(BOICs)</td>
<td>-5.248877</td>
<td>1% level = -3.702407</td>
<td>I(1)</td>
<td>0.0003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5% level = -2.986225</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10% level = -2.632604</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D(MFBCs)</td>
<td>-7.214111</td>
<td>1% level = -3.724070</td>
<td>I(0)</td>
<td>0.0308</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5% level = -2.986225</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10% level = -2.632604</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Extraction from E-views

The result presented in Table 2 validated the condition for auto regressive distributive lag accordingly. We found a mixed stationarity trend among variables under investigation where GDP and BOICs were stationary at the order of I(1) integration while BOACs and MFBCs were stationary at the order of I(0) integration. The result shows that the data became stationary in the order of I(1) and I(0) integration which fulfilled the required condition for using ARDL.
Table 3. ARDL test

Dependent Variable: GDP
Method: ARDL
Date: 01/16/20 Time: 16:31
Sample (adjusted): 1993-2018
Included observations: 26 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (0 lag, automatic): BOACS BOICS MFBCS
Fixed regressors: C

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP(-1)</td>
<td>0.012012</td>
<td>0.135419</td>
<td>0.088706</td>
<td>0.9302</td>
</tr>
<tr>
<td>BOACS</td>
<td>0.000107</td>
<td>0.000641</td>
<td>0.166473</td>
<td>0.8694</td>
</tr>
<tr>
<td>BOICS</td>
<td>0.537311</td>
<td>3.007729</td>
<td>0.178643</td>
<td>0.8599</td>
</tr>
<tr>
<td>MFBCS</td>
<td>0.510279</td>
<td>0.075174</td>
<td>6.787984</td>
<td>0.0000</td>
</tr>
<tr>
<td>C</td>
<td>3486.998</td>
<td>1801.568</td>
<td>1.935535</td>
<td>0.0665</td>
</tr>
</tbody>
</table>

R-squared 0.969336 Mean dependent var 26981.78
Adjusted R-squared 0.963495 S.D. dependent var 28088.15
S.E. of regression 6.05E-08 Schwarz criterion 20.25450
Sum squared resid 6.05E+08
Log likelihood 257.4028

*Note: p-values and any subsequent tests do not account for model selection. Source: Extraction from E-views

Table 4. Bound test result

ARDL Bounds Test
Date: 01/16/20 Time: 16:36
Sample: 1993-2018
Included observations: 26

Null Hypothesis: No long-run relationships exist

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>Value</th>
<th>k</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>1.798472</td>
<td>7</td>
</tr>
</tbody>
</table>

Critical Value Bounds

<table>
<thead>
<tr>
<th>Significance</th>
<th>I0 Bound</th>
<th>I1 Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>2.72</td>
<td>3.77</td>
</tr>
<tr>
<td>5%</td>
<td>3.23</td>
<td>4.35</td>
</tr>
<tr>
<td>2.5%</td>
<td>3.69</td>
<td>4.89</td>
</tr>
<tr>
<td>1%</td>
<td>4.29</td>
<td>5.61</td>
</tr>
</tbody>
</table>

The result in Table 3 shows the dynamic short run relationship among the employed variables under investigation [17]. The result here shows that of the three sources of SMEs financing reported in this study, only one seem to be positive and significant in stimulating economic performance in Nigeria. Microfinance bank credit to SMEs is significant in promoting economic performance in Nigeria. This is evidenced from its significant P-value of 0.0000 alongside a positive coefficient of 0.51027. Although, this is expected due to the low cost of accessing loans from microfinance banks. The result is inline with our apriori expectation.

Bank of Industry credit to SMEs (BOICs) and Bank of agricultural credit to SMEs (BOALs) all exhibited a positive coefficient of 0.000107 and 0.5373 alongside an insignificant P-value of 0.8694 and 0.8599 respectively. This thereby suggests that the quantum of credit flowing from these institutions to SMEs does not seem to significantly enhance economic performance in Nigeria. The insignificant contribution of Bank of Industry credit and Bank of agricultural credit to SMEs could be attributed to the high cost of borrowing loans from these institutions which has also reduced its contribution to economic growth.
The result of this study is in consonant with the empirical investigation of Ogunbiyi and Monogbe [5] whose study reported that the cost of accessing development banks loans is high. As such, most SMEs operators patronize semi-formal financial institution like (Micro finance and Co-operative Society) whose cost of loan is considerable and relatively low. Meanwhile, this semi-formal institution does not seem to have the huge amount of fund needed to enable the SMEs perform efficiently. Hence, for SMEs to contribute more to the performance of the Nigerian economy, cost of loan should be reviewed downward to enable easy accessibility of loan by the SMEs in Nigeria.

Further, we found that the explanatory variables jointly account for about 96 percent variation in gross domestic product while the remaining 4 percent is taken care of by the error term. The F-statistic shows evidence of overall significance in the estimated parameter, while the Durbin Watson statistic exhibited a coefficient of 1.71582 thus suggesting absence of autocorrelation.

Bound co-integration test is employed to examine the extent to which time series under investigation are co-integrated in the long run. The decision rule state that, if the F-statistics value is greater than the upper and the lower bound statistics at all levels, we reject the null hypothesis and thus conclude that there is a long run association among employed variables, if otherwise, we do not reject. From the result presented in Table 4, we observed that the F-statistics is higher than the lower and upper bound value at all levels. Hence, we reject the null hypothesis. Therefore we conclude that there exist a long run relationship among the variables under investigation.

In support of the bound test co-integration output, we further conducted a co-integration test to validate the long run association among the employed variables. The graph shows an upward trend relationship among all the time series data under investigation thereby showing that they jointly move in an upward direction in the long run. The economic implication of this is that if SMEs are adequately financed, there is a possibility that SMEs operations would boost the performance of the Nigeria economy in the future.

5. CONCLUSION

It is evident within the context of this study that credits by Bank of Industry, Microfinance Bank and Agricultural Bank credit positively influenced the overall performance of SME’s and gross domestic product in Nigeria.

Given the results of this study, it is concluded that in the long run Microfinance Banks credit is statistically significant in promoting economic
performance in Nigeria. However, Bank of Agriculture credit and Bank of Industry credit is not statistically significant in explaining variation in economic performance in Nigeria. Based on this identification, the following recommendation is suggested.

6. SUMMARY

This study examined Small and medium scale enterprises financing and economic performance in Nigeria between the periods 1992 to 2017. Since the sample size considered in this study is less than thirty observations alongside a mixed level of stationarity among employed variables, this study adopted the auto regressive distributive lag having ascertained the stationarity trends of the time series.

The research findings revealed that a positive and insignificant relationship exist between Bank of Industry credit, bank of agricultural and gross domestic product in Nigeria. Finally, a positive and significant relationship exists between microfinance banks credit to SMEs and economic growth in Nigeria. This implies that further increase in SMEs financing through microfinance bank credit will promote economic performance. Our report is in line with the findings of Kibet et al. [18] whose study show that microfinance credit have a positive and 5% significant effect on SMEs performance in Kenya.

7. RECOMMENDATIONS

- The Bank of Industry and of Agriculture in Nigeria needs reassess its activities towards SMEs and allocation of loans to SMEs in Nigeria. This is because, Bank of Industry credit exhibited a positive and insignificant influence on economic growth.
- Strategies towards sustenance and enhancing access to microfinance credit by SMEs should be improved. This is based on the positive and significant association found between microfinance bank’s credit to SME’s and economic growth in Nigeria.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES


