

Small and Medium Enterprises Financing and Economic Development in Nigeria

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ABSTRACT

This paper examines the relationship between small and medium enterprises financing and the Nigeria's economic development using the Autoregressive Distributed lag (ARDL) Model approach to Co-integration, Error Correction Model and Standard Pair-Wise Granger Causality Test. The results display that the data were stationary at first difference while a long run relationship exist among the variables under study. With regard to the direction of influence, the result reveals that significant unidirectional causalities between gross domestic product per-capita and bank of agriculture credit to small and medium scale enterprises, bank of industry credit to small and medium scale enterprises, micro- finance bank credit to small and medium scale enterprises as well as commercial bank loan to small and medium scale enterprises to domestic product per capita. The study concludes that increase in the credits by the Nigerian bank of agriculture to small and medium scale enterprises and the loans by commercial banks in Nigeria to small and medium scale enterprises will enlarge and increase the level of the gross domestic product per capita of Nigerians, the study recommends that the financial / credit institutions should increase and mobilize more funds through effective windows of financial intermediation and enhance a better policy that will make small and medium enterprises have easy access to credit facilities.

Keywords: SMEs, Economic Development, Autoregressive Distributed lag Nigeria

1. INTRODUCTION

The place of Small and Medium Enterprises (SMEs) in the achievement of economic growth especially in a developing country like Nigeria can never be over-emphasized. SMEs remain the foundation as well as the building block in the realization of any meaningful and sustainable growth in an economy. SMEs constitute the driving force in the attainment of industrial growth and development. This is basically due to their great potential in ensuring diversification and expansion of industrial production as well as the attainment of the basic objectives of growth and sustainable economy, SMEs have been stressed as capable of helping in bringing about positive economic turn around and complementing the effort of the existing medium and large scales industries (Osugwu, 2001). According to Adebusuyi, (1997), SMEs have contributed about 70% of industrial employment and over 50% of the gross domestic, Odeyemi, (2003) stated that SMEs play a crucial role in every country. The recognition of the importance of the roles of the SMEs as catalyst and engine of growth has prompted the increased attention and specific education on the method and approach to build and sustain a truly viable private sector dominated by small and medium scale enterprise (SMEs). Okpara (2000) posited that because of the role and the importance of SMEs, the performance and the financing of SMEs are of huge concern to the government of different countries of the world. Such economic contributions are obvious in the mobilization of idle financial resources, the conservation of foreign exchange, utilization of local raw materials, specialist suppliers to large companies, adding

varieties and choice for the consumers, checking the monopolistic tendency power, providing a source or innovation, breeding ground for new industries and above all employment creation (Bamidele, 2012).

SMEs utilize local raw materials and technology thereby aiding the realization of the goal of self-reliance. Also, governments at various levels (local, state and federal) have in one way or the other facilitated the performance of Small and SMEs. While some have formulated policies aimed at facilitating and empowering the growth and development and performance of the SMEs, others had focused on assisting the SMEs to grow through soft loans and other fiscal incentives in order to enhance the socio-economic development of the economy like alleviating poverty, employment generation, enhance human development, and improve social welfare of the people (Oreoluwa, 2011). According to Ekpeyong and Nyong, (1992) the sources of funds by SMEs are categorized into two dimensions which are formal and informal financial institutions, the formal financial institutions where SMEs can source for fund comprise, deposit money banks, merchant banks, insurances companies as well as development banks while the informal sources consist of money lenders, landlords, friends, family relations, Esusu as well as personal savings.

Currently, small and medium enterprises in Nigeria are not effectively performing, as they are poorly funded and the unavailability of social and economic overhead which have affected significantly the performance of SMEs to the economy (Bernet and Gnan 2009). High interest rate from deposit money banks deterred the incentive to borrow which ultimately affects the positive performances of small and medium scale enterprises to economic development in Nigeria Ekpenyong (1997), Utomi (1997) and Egbeonu, (2016). Have pointed out that insufficient capital, difficulty in accessing credit facilities and long-term development institutional credit were identified not be available to small and medium enterprises reason being that they are seen by financial institutions as high credit risk. The main objective of this study is to determine the influence of financing small and medium enterprises on economic development in Nigeria. To put this study together, it is divided into five sections, section one introduces the study which will also cover the research problem, objective, questions and hypotheses, section two does the conceptual/theoretical frameworks as well as the empirical framework. Section three is the methodology. Section presents result analysis and discussion and section five does the concluding remarks, recommendations.

2 LITERATURE REVIEW

2.1 Theoretical Framework

The Supply leading finance theory this theory is of the assumption financial development drives economic growth or that financial development is the driver of economic growth. The supply leading hypothesis argues that financial institutions and their services take place prior to actual demand for them. Thus, the accessibility of financial services stimulates the demand for these services by the entrepreneurs in the modern, growth- inducing sectors. On the other hand, the **demand following hypothesis** advocated that productivity as well as successful utilization of economy leads to financial development. In supporting this ideology, Robinson, (1952). Argued that when venture drives finance follows and suggested that financial development is merely a response or reaction to the greater demand for financial services as the real economy grows

2.2 Empirical Review

Adegbemi et al, (2013) examined the impact of financing small scale enterprises on economic growth of Nigeria using a quarterly time series data from 1992 to 2009 applied econometric estimation techniques, their findings displayed loan to small scale entrepreneur positive impact on economic performance while interest rate showed impact that is negative on economic performance, the authors concluded that the problem of SMEs in Nigeria to be lack of managerial know how and access to capital or finance as a challenge to SMES in Nigeria.

Nnamdi and Ifionu (2014) looked at the relationship between small and medium sized enterprises financing and performance of whole and retail businesses in Nigeria in a time series data from 1992 to 2013 using OLS their empirical result showed SMEs to be positive and significant in relation to economic performance, a causal significant relationship between SMEs and the performance of the economy and that the SMEs have grown at the same time level of unemployment in Nigeria. The authors concluded that SMEs can play a major role in getting some levels of economic growth in

Nigeria. Akingunola (2011) examined the performances of small and medium scale enterprises to economic growth using granger causality and regression analysis, the result of the analysis revealed insignificant relationship between SMEs and economic growth; he therefore recommend that easy access to relative low interest rate will enhance the performance of SMEs towards economic developments. Asta and Zaneta (2010) examined the growing importance of SMEs and their relative influence on economic development in Lithuania; OLS and granger causality was used in the analysis; the result indicates a strong and positive relationship between SMEs and economic development.

Akingunola (2011) assessed financing options available to SMEs in Nigeria and its contribution to economic growth through investment level; the spearman correlation test was employed in the analysis, the result showed strong and positive relationship between SMEs and economic growth.

Egbeonu (2016), investigated the impact of Financing SMEs on economic development in Nigeria he used various econometric tools such as OLS, walt hypothesis test, heteroscedasticity, Philip perron, Co integration and granger causality test were employed in his analysis; the result revealed strong and positive demand following relationship between SMEs and economic development. Onokoya, Fasanya and Abdulrahman (2013) examined the impact of financing small scale enterprises on economic growth in Nigeria, using a quarterly time series data from 1992 to 2009. The study combined several econometric estimation techniques. The findings shows that loan to small scale entrepreneurs have a positive impact on the economic performance while interest rate has a negative impact on economic growth. The study thereby concludes that the greatest or worst problem confronting SMEs in Nigeria is managerial capacity. Access to capital or finance is necessary but not a sufficient condition for successful entrepreneurial development. Oreoluwa (2011) assessed specific financing options available to SMEs in Nigeria and contribution with economic growth via investment level. The Spearman's Rho correlation test was employed to determine the relationship between SMEs financing and investment level. The analysis reports a significant Rho value of 0.643 at 10%. This indicated that there is significant positive relationship between SMEs financing and economic growth in Nigeria via investment level.

3. METHODOLOGY

The study employed secondary data which were sourced from the Central Bank of Nigeria Statistical Bulletin, Annual Financial Report of the Institutions and World Bank Record from 1992 to 2019. Given the supply leading theory suggesting that financial development drives economic growth, we construct our model: as follow:

$$GDPPC = f(CBLSME + MFBCSME + BOICSME + BOACSME) \quad (1)$$

Econometric modeling

$$GDPPC = \beta_0 + \beta_1 CBLSME + \beta_2 MFBCSME + \beta_3 BOICSME + \beta_4 BOACSME + \mu_t \quad (2)$$

Where,

- GDPPC = Gross Domestic Product Per Capita
- CBLSME = Commercial Bank Loan to SMEs
- MFBCSME = Micro Finance Bank Credit to SMEs
- BOICSME. = Bank of Industry Credit to SMEs
- BOACSME = Bank of Agriculture Credit to SMEs
- β_0 = Constant term
- β_i = Parameters or Coefficient
- μ_t = Stochastic Error Term

Given that small and medium scale enterprises would theoretically support the Nigerian economy as far development is concerned that SMEs financing variables used would each other be greater than zero (0). As a result, we expect that:

$$\beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 > 0$$

4 RESULTS AND DISCUSSIONS**Table 4.1 Descriptive Analysis Test Result**

	GDPPC	BOACSME	BOICSME	CBLSME	MFBCSME
Mean	42229.40	4897251.	451200.6	31113.77	57065.25
Median	45285.00	4343946.	439560.2	20476.36	19650.20
Maximum	53708.60	11786280	740032.6	90176.50	207963.3
Minimum	25466.80	81273.80	252838.0	10747.89	135.8000
Std. Dev.	9546.884	4515256.	92765.65	21469.44	73472.98
Skewness	0.382944	0.204105	1.127600	1.196236	1.137104
Kurtosis	1.683352	1.360691	5.496892	3.810812	2.754547
Jarque-Bera	2.706834	3.329631	13.20713	7.444891	6.104315
Probability	0.258356	0.189226	0.001356	0.024175	0.047257
Sum	1182423.	1.37E+08	12633617	871185.6	1597827.
Sum Sq. Dev.	2.46E+09	5.50E+14	.32E+11	1.24E+10	1.46E+11
Observations	28	28	28	28	28

Source E-View 9.1 output

A look at the table 4.1 above, shows that the average amount of the gross domestic product per capita value for a period of 28 years covered in this study is 42229.40 while that of bank of agriculture credit to small and medium scale enterprises (BOACSME), bank of industry credit to small and medium scale enterprises (BOICSME) commercial bank loans to small and medium scale enterprises (CBLSME) and micro finance bank loans credit to small and medium scale enterprises (MFBCSME) are, 4897251., 451200.6, 31113.77 and 57065.25 respectively. BOACSME has the highest average value of 4897251. Seconded by BOICSME which has average value of 451200.6. In each data series when it comes to the center in this model is being described best by the median values which by virtue of the implication looking at their values such as 45285.00, 4343946., 439560.2, 20476.36 and 19650.20 provide a measure that is more valid when it comes the central location of the different time series- GDPPC, BOACSME, BOICSME, CBLSME and MFBCSME respectively. However, the GDPPC growth rate ranges from 25466.80 to 53708.60 while the ranges of the BOACSME, BOICSME, CBLSME and MFBCSME are from 81273.80 to 11786280, 252838.0 to 740032.6, 10747.89 to 90176.50 and 135.8000 to 207963.3 respectively, BOACSME has the highest maximum value of 11786280 seconded by BOICSME with a maximum value of 740032.6. BOACSME and BOICSME have the first highest standard deviation which is a clear indication that BOACSME and BOICSME are the most volatile variables in nature as it is evident by their level of dispersion from the mean as captured by the standard deviation. The average values of the remaining variables are not dispersed as much extent compared to that of BOACSME and BOICSME in terms of their average values instead, they clustered closely about the mean. The data on the variables GDPPC, BOACSME, BOICSME, CBLSME and MFBCSME are positively skewed which by meaning suggests that within the 28 years period under study, the average values of these variables are skewed to the right towards normality as it is evident by the fact that their mean values are larger than the median (Lind, Marchal and Wathen, 2006). In congruent with the Bowman-Shelton test for normality which actually is based on the closeness to zero (0) of the sample skewness and the closeness to 3 of the sample kurtosis, so, the kurtosis of the gross domestic product per capita (GDPPC), bank of agricultural credit to small and medium scale enterprises, (BOACSME) and microfinance bank credit to small and medium scale enterprise, (MFBCSME) are less than 3 which is a clear indication that they are platykurtic in nature while bank of industry credit to small and medium scale enterprises, (BOICSME) and commercial bank loan to small and medium scale enterprise, (CBLSME) are leptokurtic in nature which means that the later two variables are higher than 3. Noting that kurtosis provides a measure of the weight in the trail of probability density function (Newbole 1995).

Table 4.2 ADF Unit Root Test Results

Variables	ADF	Critical Value	Status	Probability Value	Remark
GDPPC	-3.143268	-2.981038	1 st dif.	0.0356	Stationary
CBLSME	-5.326497	-2.981038	1 st dif.	0.0002	Stationary
BOICSME	-5.792699	-2.986225	1 st dif.	0.0001	Stationary
MFBCSME	-4.505252	-2.981038	1 st dif.	0.0015	Stationary
BOACSME	-5.775790	-2.986225	1 st dif.	0.0001	Stationary

Source E-view9.1 output

The result above showed that the time series data are stationary at 1st difference at 5% significance this can be authenticated as the ADF statistics values are greater than the critical values and the probability values are also less than our 5% level of significant.

Table 4.3ARDL model test result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4871.200	1897.931	2.566584	0.0215
D(GDPPC(-1))	0.082032	0.226903	0.361529	0.7227
D(BOACSME(-1))	-0.000390	0.000118	-3.292292	0.0049
D(BOICSME(-1))	-0.003164	0.003643	-0.868689	0.3987
D(CBLSME(-1))	-0.013281	0.013053	-1.017417	0.3251
D(MFBCSME(-1))	0.008299	0.012288	0.675371	0.5097
GDPPC(-1)	-0.219358	0.065197	-3.364519	0.0043
BOACSME(-1)	0.000602	0.000156	3.861636	0.0015
BOICSME(-1)	0.003773	0.005920	0.637325	0.5335
CBLSME(-1)	0.045553	0.011796	3.861754	0.0015
MFBCSME(-1)	-0.009962	0.004766	-2.090019	0.0541
R-squared	0.685281	Mean dependent var		1007.651
Adjusted R-squared	0.475468	S.D. dependent var		999.9607
S.E. of regression	724.2176	Akaike info criterion		16.30417
Sum squared resid	7867366.	Schwarz criterion		16.83644
Log likelihood	-200.9542	Hannan-Quinn criter.		16.45744
F-statistic	3.266151	Durbin-Watson stat		2.439993
Prob(F-statistic)	0.019219			

Source E-view9.1 output

From the result in Table 4.3.where the GDPPC is the dependent variable at lag 1, out of all the independent variables , only BOACSME(-1) and CBLSME(-1) are positively significant while the other remaining independent variables are positively and negatively insignificant looking within our 5% level of significant, the adjusted R-square of approximately 0.48% showed that 48% of the gross domestic product per capita in Nigeria can be captured and explained by the independent variables as Durbin-Watson statistics of 2.4 showed no serial autocorrelation among the variables under study and the significant of the overall model is good with the F- statistic given as 3.27 and a probability value of 0.019219 being less than our 5% level of significance.

Table 4.4 Error Correction Model (ECM) Test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1670.384	203.9623	8.189669	0.0000
D(BOACSME(-1))	-0.000348	0.000112	-3.106984	0.0056
D(BOICSME(-1))	-0.009465	0.002545	-3.718608	0.0014
D(CBLSME(-1))	-0.008497	0.012003	-0.707872	0.4872
D(MFBCSME(-1))	-0.008303	0.009807	-0.846635	0.4072
ECM(-1)	-0.249271	0.056423	-4.417922	0.0003
R-squared	0.538344	Mean dependent var		1007.651
Adjusted R-squared	0.422930	S.D. dependent var		999.9607
S.E. of regression	759.6214	Akaike info criterion		16.30269
Sum squared resid	11540492	Schwarz criterion		16.59302
Log likelihood	-205.9350	Hannan-Quinn criter.		16.38630
F-statistic	4.664460	Durbin-Watson stat		2.007163
Prob(F-statistic)	0.005523			

Source E-view9.1 output

From the table 4.4 above, the speed of adjustment towards long run equilibrium is -0.249271 and the probability value are 0.0003, the guideline is that the ECM must be negative and significant. Meaning that in this our results of ECM, the whole system can get back from the short run to the long run equilibrium at a speed of approximately 25%.and the Durbin Watson is 2.0 which correctly means an absence of autocorrelation, the adjusted R^2 showed 0.422930, which means that 42% of the dependent variable can be captured and explained by the independent variables in this model, finally, the F-statistics value of 4.664460 and a probability value of 0.005523 which is less than our 5% level of significance showed that the model is good and fit.

Table 4.5 Granger Causality Test Result

Null Hypothesis:	Obs	F-Statistic	Prob.
BOACSME does not Granger Cause GDPPC	27	0.03857	0.8460
GDPPC does not Granger Cause BOACSME		10.6668	0.0033
BOICSME does not Granger Cause GDPPC	27	0.26086	0.6142
GDPPC does not Granger Cause BOICSME		7.60902	0.0109
CBLSME does not Granger Cause GDPPC	27	4.90290	0.0366
GDPPC does not Granger Cause CBLSME		2.99980	0.0961
MFBCSME does not Granger Cause GDPPC	27	2.75123	0.1102
GDPPC does not Granger Cause MFBCSME		5.12439	0.0329

Source E-view9.1 output

From the estimation test result on the direction of causality in this table at lag 1 revealed that there is a unidirectional causality flowing or running from GDPPC to BOACSME, there is also a unidirectional causality running from GDPPC to BOICSME, there is unidirectional causality tinkling from CBLSME to GDPPC, lastly there also a unidirectional causality flowing from GDPPC to MFBCSME all within the limit of our experimental error (at 5% level of significance).

5. CONCLUSION AND RECOMMENDATIONS

The findings of this study revealed that in the variables were not stationary in the same order, (first diff), which led the application ARDL to ascertain the variable's behaviors consequences in the short and long run, the ARDL test showed that only bank of agriculture credit to small and medium scale enterprises (BOACSME-1) and commercial bank loan to small and medium scale enterprises (CBLSME -1) are positively significant while the other remaining independent variables are positively and negatively insignificant looking within our 5% level of significant, which means that

increase in bank of agriculture credit to small and medium scale enterprises (BOACSME) and commercial bank loan to small and medium scale enterprises (CBLSME) will lead to increase in the gross domestic product per capita (GDPPC) in Nigeria, as this was evidenced by the adjusted R-square of approximately 0.48% which implied that 48% of the gross domestic product per capita in Nigeria can be captured and explained by the independent variables as Durbin-Watson statistics also displayed 2.5 meaning no serial autocorrelation among the variables under study and the significant of the overall model was good with the F- statistic given as 3.27 and a probability value of 0.019219 being less than our 5% level of significance, The error correction model (ECM) test result displayed approximately 25%.to be the speed of adjustment in the short and long run equilibrium, with an adjusted R² of 42% which is a clear indication that 42% in this result, of the dependent variable can be explained and captured by the explanatory variables as the Durbin Watson showed the absence of autocorrelation, the F- statistics displayed 4.664460 and a probability value of 0.005523 which is less than our 5% level of significance meaning that the model is good and fit. The result of the causality test result at lag 1 showed that there is a unidirectional causality flowing from gross domestic product per capita (GDPPC) to bank of agriculture credit to small and medium scale enterprises (BOACSME), bank of industry credit to small and medium scale enterprises (BOICSME) and micro- finance bank credit to small and medium scale enterprises (MFBCSME) as well as unidirectional causality trickling from commercial bank loan to small and medium enterprises (CBLSME) to gross domestic product per capita (GDPPC). In the light of the results of this study, we recommend that:

- i. The financial credit institutions should increase and mobilize more funds through effective windows of financial intermediation and enhance a better policy that will make small and medium enterprises have easy access to credit facilities.
- ii. The policy makers should lower the interest rate to zero or one digit interest rate as this will encourage the small and medium scale enterprises to be more productive, as a result, increasing the gross domestic product per capita of Nigeria in the long run.

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