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Banks' Intermediation Role and Small Scale Enterprises Performance: Empirical Evidence from Vector Error Correction Mechanism

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Abstract

Financial intermediaries such as banks, acting as agents specifically fill the information gaps between ultimate savers and investors. The funds mobilized from numerous customers are aggregated and disbursed as credit facilities to the deficit sector usually the investors. These facilities in form of loans and advances facilitate the exploration and expansion of productive investment by small, medium and large scale industries. Thus, the study examines effect of banks' intermediation role on performance of small scale enterprises in Nigeria. Expos-facto research design was used and the population of the study comprises all the deposit money banks operating in Nigeria as 31st December, 2017. This study used secondary data, extracted from the CBN Statistical Bulletin. The data are time series in nature which cover thirty-six years period from 1981 to 2016 and were analyzed through Vector Error Correction Mechanism. The study found that in the long run banks' loan and advance and lending rate have positive significant effect on performance of small scale enterprises while the inflation rate has negative significant effect on performance of small scale enterprises in the long run. The study concluded banks intermediation role through granting of credit facility has a long-run effect on the performance of the small enterprises and this will enhance the Nigerian economy in the long run. The implication of this study is that an increase in the loan and advances in the long-run will promote more productive investment activities to increase capital formation in the country. In view of this, the study recommends that Central bank of Nigeria should adopt appropriate mechanism to control the inflation rate in the economy as this has a great effect on the loan and advances given to the small scale enterprises.

Keywords

Banks' Intermediation Role, VECM, Expos-Facto, Performance of Small Scale Enterprise

1. Introduction

Development of small scale enterprises is an instrument through which sustainable development can be attained. It ensures that the general population can attain an acceptable level of welfare both at present and in the future. This corroborate with the assertion of [3] who view that one of the instruments that have been utilized to reduce poverty and promote economic development is the promotion of small and medium scale enterprises. In recognition of the above statement, one of the major sources of funds for the survival of the small and medium enterprises to perform their expected role of rapid industrialization and economic growth is commercial banks' credit. Commercial banks through their financial intermediation role are expected to provide financial leverage for small and medium scale enterprises. Contrary to this, in most developing countries in Sub-Sahara Africa including Nigeria, small and medium scale enterprises are plagued with paucity of capital, thus affecting their ability to grow ([17]). Given the fact that small and medium enterprises have been generally acknowledged as the bedrock of industrial development of nations across the globe and financial institutions especially Deposit Money Banks are theoretically expected to provide financial succour for their growth. The significant role played by small and medium scale enterprises in the economic growth process of nations propel the need for more researches in this area. Thus, vast researches have been conducted on roles of commercial banks on the performance of small and medium enterprises

but most of these studies are explorative and qualitative in nature. Thus, this study charts a different path to examine the dynamic effect of banks' intermediation role on performance of small scale enterprises in Nigeria. In view of this, the objectives of the study are; to examine effect of deposit money banks' loan and advances on performance of small scale enterprises in Nigeria; to examine effect of interest rate on performance of small scale enterprise in Nigeria. In line with these objectives, the research questions are; does deposit money banks' loan and advances have effect on performance of small scale enterprises in Nigeria? What effect does interest rate have on performance of small scale enterprises in Nigeria? In consonance with these research questions and objectives, the following research hypotheses are formulated; deposit money banks' loan and advances has no significant effect on performance of small scale enterprises in Nigeria; interest rate has no significant effect on performance of small scale enterprises in Nigeria. To achieve these objectives, the remaining part is structured thus: section two reviewed literature on bank intermediation role and performance of small scale enterprises, section three outlines the methodology adopted for the study. Data analysis and discussion were presented in section four while section five concludes the paper and proffer recommendations.

2. Literature Review

This section presents a review of relevant empirical evidences on the topic. It covers studies in developed, emerging, developing as well as Nigerian economies. The impact of 2004 banking reforms on the financing of SMEs in Nigeria was examined by [11]. The study adopted a randomly chosen sample size of 500 respondents and employed Chi square test. The results revealed that there is no significant impact of 2004 banking reform on the financing of SMEs in Nigeria and suggested that there are some constraints that militate against access to credit from Commercial Banks by SMEs. In a related study, [14] investigated the impact of post-bank consolidation on the performance of small and medium scale enterprises in Nigeria, using Lagos state as a case study. The study drew a sample size of 50 from the supra-population of the study within Ikeja local Government area of the State and adopted mean, standard deviation and coefficient of variation in their data analysis. The findings showed that small and medium scale enterprises do not have access to finance through banks, due to neo-reorganization in banks as a result of post-bank consolidation and SMEs do not have perfect rapport with financial institutions as a result of their financial background in Nigeria. Thus, the study concluded that there are mixed consensus on the role of Commercial banks' financing of SMEs in Nigeria. [12] examined the impact of bank loans on manufacturing output in Nigeria between 1992 and 2010. The study adopted secondary data which were drawn from Central Bank of Nigeria statistical bulletin. The study employed error correction modelling technique to analyse the data gathered from the bulletin and found that banks' credit to the SMEs had significant impact on manufacturing output both in the short run and long run. The study concluded that commercial banks' role in extending credit to the SMEs in Nigeria is not impressive. Dada [5] conducted a study on credit accessibility to small and medium scale survival. The study maintained that access to credit is crucial for the growth and survival of small and medium scale enterprises (SMEs) utilizing data from 1992 to 2011 and adopting ordinary least squares regression, the study revealed that Commercial Banks' credit to SMEs and saving and time deposit of commercial banks exert a positive influence on SMEs' development while exchange rate and interest rate have adverse effects on SMEs' development. Thus, study recommended that Commercial Banks should lend more to the SMEs at subsidized rate.

[15] analyzed the role of finance in the growth of small and medium scale enterprises in Edo State, Nigeria. The study adopted a survey research design and a sample of 122 respondents was used. Cronbach Alpha was used to compute the reliability of the instrument and yielded 0.89. The findings showed that SMEs growth was hindered as a result of inability to access funds from financial institutions as a result of stringent policies required by banks and other financial institutions. The study recommended that necessary financial assistance should be given to the sector by government and other stake holders in order to accelerate the growth of SMEs in the rural communities to reduce the current unemployment and rural- urban migration. [13] examined the impact of Commercial Banks in financing small and medium scale enterprises (SMEs) in Nigeria for the period 2002 to 2012. The authors collected annual data from ten Commercial Banks and adopted panel data regression analysis. The results found that Commercial Banks have significant impact on SMEs' financing which implies that Commercial banks are capable of making SMEs grow. Thus, credit from the commercial bank should be more flexible in order to enhance the growth of SME's in Nigeria. In a related study, [8] investigated empirically the impact of Commercial Banks' credit on small and medium scale enterprises in Nigeria between 1986 and 2012, using co-integration and error correction modeling technique. The findings revealed that SMEs and selected macroeconomic variables included in the model are co-integrated indicating a long run relationship between them. The findings further revealed that savings, time deposit and exchange rate have significant impact on SMEs' output in Nigeria, while interest rate has adverse effect. The paper therefore recommended among others that interest rate on credit facility granted to SMEs should be drastically reduced and soft loans devoid of stringent conditions be granted to the SMEs. Again [9] examined the relationship between Commercial Bank credits indicators and availability of credit facility to small and medium scale enterprises in Nigeria. Using data extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin for the period, 1980-2010 and adopting the generalized least squares estimation technique, the results showed that Commercial Banks' credits to SMEs have significant effect

on Nigeria's economic growth by positively affecting gross domestic product. This implies that SMEs' financing is a great catalyst and driving force for economic growth. The paper recommended that soft and short term loans should be made available to SMEs for further growth.

In more recent studies, [7] conceptually reviewed the importance of finance in the development of small and medium enterprises (SMEs) in Nigeria with the objective to specifically examine the role financial institutions play in financing small and medium enterprises in Nigeria. The study methodologically discussed various policies adopted by the government to achieve the Small and Medium Enterprises Equity Investment Schemes aims and objectives. The study concluded that Small and medium enterprises equity investment scheme (SMEEIS) if properly managed considering the volume of funds dedicated, could provide the necessary impetus for growth in the economy. In a study conducted by [1] on the role of MFBs on employment generation in the grassroots of Karu Local Government Area (L.G.A) of Nasarawa State. The study employed descriptive statistics as a toll of analysis and found that the greatest effect of the financial intermediation of MFBs in the grassroots was the creation of jobs. The study concluded that the major problem militating against the MFBs in the area of financial intermediation for employment generation in the grassroots was lack of entrepreneurial skills. In a similar study conducted by [13], on impact of Microfinance on grassroots development in Kwabre East District of Ashanti Region in Ghana. Data were sought through a structured questionnaire administered to 82 respondents. The analysis was done through the descriptive statistical technique of percentages and frequency distribution. The results showed that microfinance had some impacts on grassroots development. The study concluded that the impact of microfinance in strengthening organizations and the society at large were not clear.

[2] examined impact of small and medium scale enterprises in Nigeria with reference to Abuja Municipal Area Council (AMAC). The study adopted primary method of data collection using structured questionnaire with three sections for data collection from the respondents and were analyzed using percentage and chi-square. From the result it was found that there are SMEs activities in Abuja Municipal Area Council (AMAC), the SMEs have low and poor social responsibility services in Abuja Municipal Area Council (AMAC). The study concluded that the challenges of SMEs in Nigeria are inadequate in finance, poor access to credit facilities, poor government participation, inconsistent government policies, poor infrastructure development in the country, low assistant of SMEDAN and other credit guaranteed financial institutions to SMEs in Nigeria. Therefore, the study recommends that the Nigerian government should provide the basic infrastructure that will assist the SMEs and there is the need to establish formal financial institutions just like the Bank of Industry (BOI) with the mandate of providing financial support specifically to the SMEs.

From the literature reviewed, it was found that most of the studies made use of primary data and they are qualitative in nature. Also there is no consensus among the researchers on effect of deposit money bank role on performance of small scale enterprise. Based on this, there is a need for further research in this area and this justify the importance of this research using secondary data and more robust tool of statistical analysis to examine the long-run and short-run effect of deposit money bank role on performance of small scale enterprise within the Nigerian context. The finance led growth hypothesis provides a veritable framework and a lucid explanation for the link between banks' credit and the growth of the Small and Medium Enterprises. Thus, this was adopted for this study.

3. Methodology and Model Specification

Expos-facto research design is adopted in this study which is characterizes with quantitative or numeric description of historical data. The population of the study comprises all the deposit money banks operating in Nigeria as 31st December, 2017. The data were extracted from the Central Bank of Nigeria Statistical Bulletin. The data are time series in nature and cover thirty-six years period from 1981-2016. The model specification incorporates banks' intermediation role variable and performance of small scale enterprises variable. The models are specified below:

$$\Delta^{ko}LSEP_t = \Theta_o + \Sigma_{i=1}^{n}\Theta_1(\Delta^{k1}LBLN_{t-i}) + \Sigma_{i=1}^{n}\Theta_2(\Delta^{k2}\ LLDR_{t-i}) + \Sigma_{i=1}^{n}\Theta_3(\Delta^{k3}\ LINF_{t-i}) + \mu_t \quad (1)$$

$$\Delta^{ko}LSEP_t=\Theta_o+\Sigma_{i=1}^{n}\Theta_1(\Delta^{k1}LBLN_{t-i})+\Sigma_{i=1}^{n}\Theta_2(\Delta^{k2}LLDR_{t-i})+\Sigma_{i=1}^{n}\Theta_3(\Delta^{k3}LINF_{t-i})+\Sigma_{i=1}^{n}\Theta_6(ECM_{t-i})+ \mu_t \quad (2)$$

Where: LBLN represents logarithm of banks' loan and advance, LLDR represents logarithm of lending rate, LINF represents logarithm of inflation rate, LSEP represents logarithm of small scale enterprises performance, Δ represents Difference Operator, *Θi* represents parameters to be estimated, *t-i* represents Unknown lags to be estimated, ECM represents the error correction mechanism and *μt* represents the error term. The use of natural logarithm, rather than levels and percentage changes, mitigates correlations among the variables. Also, it helps in reducing heteroscedasticity as it compresses the scale in which variables are being measured. Kuwornu (2012). In estimating the models and achievement of the research objectives, the data are subjected to series of test such as lag selection criteria, unit root test, and correlation test among others.

Table 1. *Measurement of Variables.*

Variables	Types	Measurement	Source
LSEP	Dependent	Proportion of Small Scale to the real gross domestic product	Joseph and Nnanyelugo (2015)
LLDR	Independent	Index	CBN bulletin (2016)
LBLN	Independent	Index	CBN bulletin (2016)
LINF	Control	Index	CBN bulletin (2016)

Source: Researcher' Compilation (2018).

4. Result and Discussion

This section presents the descriptive statistics, pre-model estimation test, estimation, post-model estimation and discussion of findings.

4.1. Descriptive Statistics

Table 2 shows the summary of descriptive statistics computed for each of the variable used in the study.

Table 2. *Statistical Description of Data.*

	LBLN	LINF	LLDR	LSEP
Mean	10.04304	2.645892	3.020006	2.572598
Median	9.927014	2.434782	3.060466	2.507222
Maximum	11.40952	4.288204	3.586016	2.843615
Minimum	8.753687	1.683102	2.302585	2.276179
Std. Dev.	0.660457	0.697675	0.301159	0.165928
Skewness	0.217792	1.137809	-0.772584	0.430276
Kurtosis	2.160224	3.115838	3.141917	1.936368
Jarque-Bera	1.342437	7.787784	3.611531	2.807797
Probability	0.511085	0.020366	0.164349	0.245637

Source: Computation from E-view Output, (2018).

From the above Table 2, it reveals that all the variables displayed an increasing tendency throughout the period of investigation. Thus, there is statistical evidence that for the period of 36 years banks' loan and advance (LBLN), inflation rate (LINF), lending rate (LLDR) and small scale enterprises (LSEP) have been increasing. Looking at the range of these variables, banks' loan and advance has the largest range (8.753687-11.40952), followed by inflation rate with the range (1.683102- 4.288204). These ranges associate with standard deviations 0.660457 and 0.697675 respectively. These appear to be the largest standard deviations observed among the variables. Therefore, inflation and banks' loan and advance are the most volatile variables. In a different token, small scale enterprise performance and lending rate have the lowest range and volatility. The scale of skewness with respect to LBLN, LINF and LSEP are 0.217792, 1.137809, and 0.430276 respectively. This implies that these variables are positively skewed and as such, they exhibit large values over a short period. On the contrary, LLDR is negatively skewed with a value of -0.772584 and this implies that it exhibits large value over a long period of the sampling period. The values of kurtosis that are larger than 3 are LINF and LLDR and this implies leptokurtic, and as such they have tin tail in their distribution pattern, suggesting that there are presence of outliers or large values in the expected future date. However, while LBLN and LSEP are plytokurtic in nature. Finally, the probability values corresponded to Jarque-Bera statistics with respect to banks' loan and advance, lending rate and small scale enterprises performance are greater than 5 percent, meaning that the distribution pattern of these variables are normal. However, the probability value in respect to inflation rate is less than 5 percent, meaning that the distribution pattern of this variable is not normal. The study proceeds to describe these variables using graphs as demonstrated below.

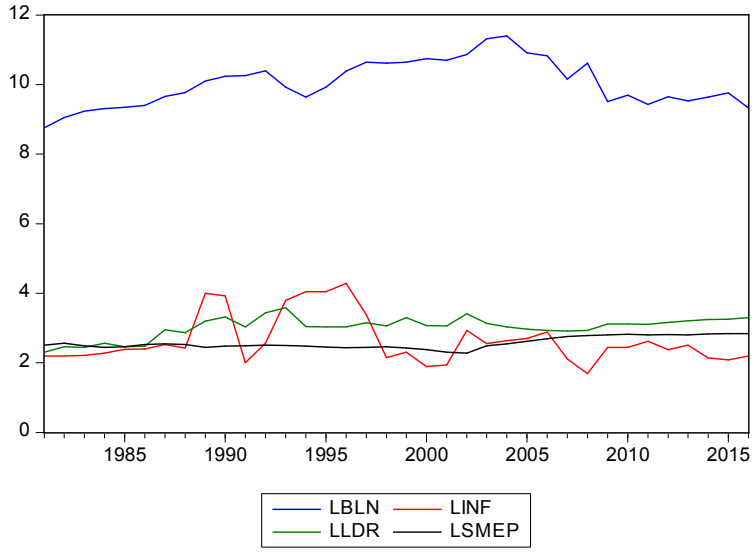

Figure 1. *Line Graphs of LBLN, LLDR, LIN and LSEP.*

Source: Drawn from E-view, (2017).

As shown in figure 1, banks' loan and advance given by the deposit money bank to small scale enterprises is increasing and reach it maximum in 2005, then after this period it started declining. This decline in the banks' loan and advance after 2005 might be attributed to several reforms experience in the banking industry such as consolidation process which forced so many banks into merger and acquisition and some bank ceased to exist due to the tune of huge capital base of 25billion naira as required by the central Bank of Nigeria. The graph also shows that banks' loan and advance is increasing as the lending rate also increases. This confirms to some extent a linear relationship between the loan and advances and the lending rate. The increase in the lending rate has affected the performance of the small scale enterprises as it barely improves when compared with the banks' loan and advance from the graph. The inflation rates swings but rose astronomically in 1995.

Figure 2 is a pie chart showing the proportion or contribution of each variable to the overall hotchpot. As revealed in the chart, banks' loan and advance to small scale enterprises have the largest proportion, followed by lending rate. The proportion of the inflation rate and the performance of the small scale enterprises are almost equal.

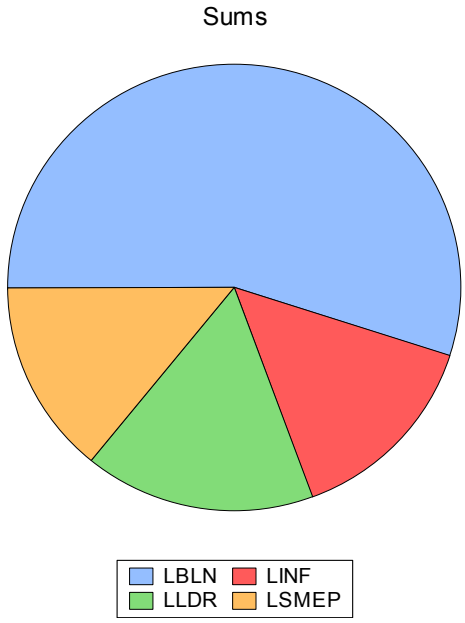

Figure 2. *Showing LBLN, LLDR, LIN and LSEP.*

Source: Drawn from E-view, (2018).

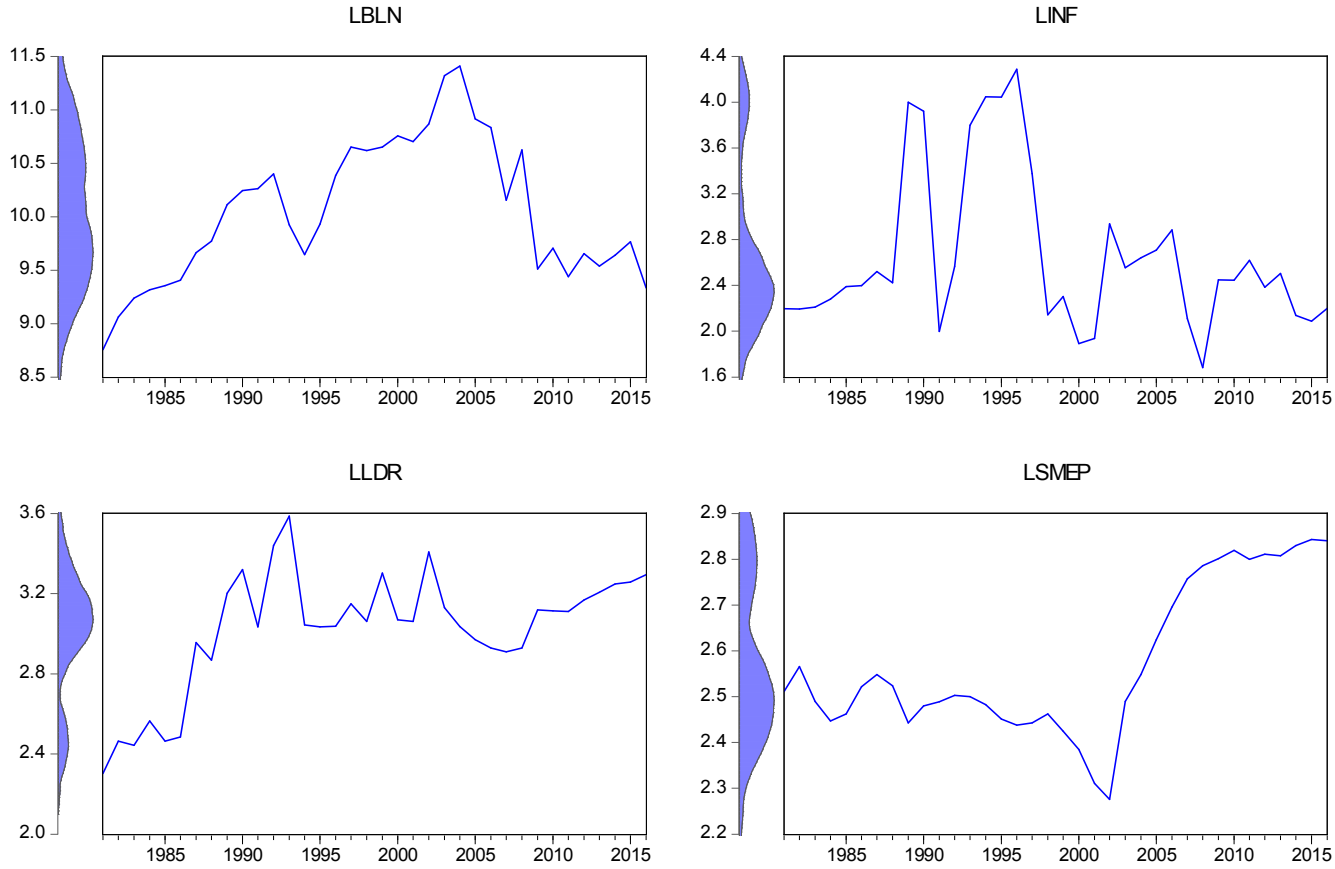

Figure 3. *Kernel Density Plot of LBLN, LINF, LLDR and LSMEP.*

Source: Drawn from E-view, (2018).

The density plot of the series of banks' loan and advance, inflation rate, lending rate and small scale performance shown in the figure 3 reveal that they do not have equal tails; they are referred to asymmetric distribution variable series.

4.2. Pre-estimation Test

The study conducts pre-estimation test which include; lag selection test, Augmented Dickey-Fuller (ADF) method for stationarity test and correlation analysis for perfect collinearity test.

The result of optimum lag selection criterion is presented below:

Table 3. *Optimum Lag Selection for the Specified Variables.*

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-43.71552	NA	0.000212	2.891850	3.073245	2.952884
1	41.18480	144.0733*	3.29e-06*	-1.28392*	-0.37695*	-0.97875*
2	57.06034	23.09170	3.47e-06	-1.276385	0.356169	-0.727080
3	71.45595	17.44922	4.33e-06	-1.179148	1.178985	-0.385708

Note that: * indicates lag order selected by the criterion, LR: sequential modified LR test statistic (each test at 5% level), FPE: Final prediction error, AIC: Akaike information criterion, SC: Schwarz information criterion and HQ: Hannan-Quinn information criterion.
Source: Computation from E-view Output, (2018).

The lag selection test shows that all the information criteria- FPE, AIC, SC and HQ have the smaller value at lag 1; implying that 1 is the optimum lag selected by these information criteria. Thus, the AR framework that gives rise to unit root test and to cointegration and vector error correction mechanism are operationalized using lag 1 as the optimal lag.

The variables used for the study were subjected to unit root test and the result is presented below.

Table 4. *ADF Unit Root Test wrt LSEP, LBLN, LLDR and LINF.*

Variables	ADF Stat.	1%C.Value	5%C.Value	10%C.value	Prob.	Integ.Order
LSEP	-4.356742	-3.639407	-2.951125	-2.614300	0.0015	I(1)
LBLN	-6.696648	-3.639407	-2.951125	-2.614300	0.0000	I(1)
LLDR	-5.962578	-3.646342	-2.954021	-2.615817	0.0000	I(1)
LINF	-5.730149	-3.639407	-2.951125	-2.614300	0.0000	I(1)

Source: Computation from E-view Output, (2018).

The result shows that all the variables were not stationary at level form but at their first differences, indicating here that they are all integrated of order 1 i.e. I(1). The result of correlation matrix is presented below.

Table 5. *Correlation Matrix wrt LSEP, LBLN, LLDR and LINF.*

	LBLN	LINF	LLDR	LSMEP
LBLN	1			
LINF	0.105371	1		
LLDR	0.460354	0.311872	1	
LSMEP	-0.324630	-0.315165	0.114727	1

Source: Computation from E-view Output, (2018).

Pearson correlation coefficients are used to explain the extent of association among the variables for the period between 1981 and 2016. The interpretation of the Pearson correlation would follow Guilford rule of thumb which is < 0.2 is a negligible correlation, 0.2 to 0.4 is low correlation, 0.4 to 0.7 is a moderate correlation, 0.7 to 0.9 is a high correlation > 0.9 is a very high correlation. The result shows that the correlation between the independent variables and dependent variable used in the model is generally small. The largest correlation coefficients exist between the lending rate and banks' loan and advance (46.03%). The result shows that small scale enterprises' performance is negatively correlated to inflation rate and banks' loan and advance. Also, the correlation matrices does not reveals that two explanatory variable are perfectly correlated. This means there is absence of multicollinearity problem in our model.

4.3. Estimation Test

From the pre-model estimation test it was confirmed that all the variables were all stationary at first difference as showed in Table 4, the researcher performed the Johansen multivariate co-integration test to examine the existence of co-integrating relationship and the result is presented below.

Table 6. *Results from Johansen's Co-integration Test.*

Hypothesis No of CES	Eigenvalue	Trace statistics	0.05 critical value	Prob.**	Max-Eigen Statistics	0.05 critical value	Prob.**
None *	0.694514	74.13197	63.87610	0.0054	40.31894	32.11832	0.0040
At most 1	0.409933	33.81303	42.91525	0.2971	17.93566	25.82321	0.3821
At most 2	0.259586	15.87737	25.87211	0.5024	10.21854	19.38704	0.5955
At most 3	0.153323	5.658824	12.51798	0.5048	5.658824	12.51798	0.5048

Trace and Max-eigenvalue test indicate 1 co-integrating equation at the 0.05 level
*denotes rejection of the hypothesis at the 0.05 level
**Mackinnon-Haug-Michelis (1999) P-values
Source: Computation from E-view Output, (2018).

The result of the test reveals that the p-value of the trace statistics for the null hypothesis of no co-integrating relationship in Table 6 is less than 0.05, meaning that the null hypothesis can be rejected. In addition, the value trace statistic (74.13197) is greater than the 0.05 critical values of 63.87610, affirming that the null hypothesis that there is no co-integrating relationship among the variables cannot be accepted. However, the p-value of the trace statistic corresponding to 'At most 1" is 0.2971, which is greater than 0.05, meaning that the null hypothesis that there is at most one co-integrated equation or co-integrating relationship between the variables cannot be rejected (meaning it can be accepted). Furthermore, the value of the trace statistic corresponding to 'At most 1', is 33.81303 which is lesser than the 0.05 critical value at that point (42.91525), indicating that the null hypothesis that "At most 1" co-integrating relationship exists between the variables could not be rejected (i.e. it can be accepted). This also conforms to the Max-Eigen statistic. In effect, there exists at most 1 co-integrating relationship among the variables LBLN, LLDR, LINF and LSEP as confirmed by both co-integrating test. When only one co-integrating vector is established its parameters can be interpreted as estimates of long run co-integrating relationship between the variables (Hallam & Zanoli, 1993).

Having confirmed that there is co-integration relationship the study examines the long-run relationship in Table 7 and short-run dynamism in Table 8 respectively and the results are presented below.

Table 7. *Nature of the Long Run Relationship between LSEP LBLN, LLDR, and LINF.*

Variable	Coefficient	Std-error	T-value
LBLN(-1)	0.169604	(0.02132)	[7.95404]
LLDR(-1)	0.146243	(0.06241)	[2.34340]
LINF(-1)	-0.102050	(0.02106)	[-4.84677]

Source: Computation from E-view Output, (2018).

The long run coefficient with respect to banks' loan and advance is 0.169604 and the associated t-value 7.95404. This means in the long run banks' loan and advance will increase significantly with increase in performance of small scale enterprises. Therefore, if more credit facility is given to small scale enterprises, there will be a positive turn out rate in their performance. The long run coefficient of lending rate reveals positive and significant on the performance of small scale enterprises. In the long run, a rise in inflation rate exerts a decrease in small scale enterprises' performance. This means that the value of credit facility sourced from bank is reduced by inflation. The disequilibrium in the long run must be corrected otherwise; long run relationship does not exist. The correction mechanism is referred to error correction model (ECM). Thus, the study estimate the ECM coefficient along with short run dynamic coefficients and the result is presented below.

Table 8. *Short run dynamic coefficients of LSEP LBLN, LLDR, and LINF.*

Variable	Coefficient	Std. Error	T-value
ECM	-0.118086	(0.10670)	[-1.10667]
D(LSMEP(-1))	0.481298	(0.20291)	[2.37196]
D(LBLN(-1))	-0.008916	(0.02840)	[-0.31391]
D(LLDR(-1))	0.054310	(0.05822)	[0.93284]
D(LINF(-1))	0.014041	(0.01906)	[0.73678]

Source: Computation from E-view Output, (2018).

The values of these coefficients are presented in Table 8. The coefficients of short run dynamic variables- DLSMEP(-1), DLBLN(-1), DLLDR(-1), DLINF(-1) and ECM coefficient. The dynamic coefficients of LSMEP, LLDR and LINF at lag 1 are positive except LBLN. This means an increase in previous performance of small scale enterprises, lending rate and inflation could lead to increase in current performance of small scale enterprises, lending rate and inflation respectively in the short run. While previous banks' loan and advance could lead to decrease in current banks' loan and advance. Also the result shows that the entire variables are not significant at 5% except performance of small scale enterprises. In addition, the Error Correction Mechanism (ECM) coefficient is negative -0.118086, suggesting that any disequilibrium can be corrected at the speed or rate of 11 percent within a year. In view of this, there is long run dynamic causality or influence running banks' loan and advance, lending rate and inflation to performance of small scale enterprises.

4.4. Post-estimation Test

The VEC models are subjected to residual based test to confirm if the basic classical assumptions are violated or not. These assumptions are serial correlation, normality and heteroscedasticity. The results are presented below in Table 9.

Table 9. *Serial Correlation Test, Normality and Heteroscedastic Test on VEC Specification.*

Serial Correlation Test		
Lags	LM-Stat	Prob
1	12.13135	0.7349
2	19.34384	0.2512
Normality Test		
Component	Jarque-Bera	Prob.
1	28.55725	0.0000
2	0.164625	0.9210
3	6.138266	0.0465
4	0.587089	0.7456
Joint	35.44723	0.0000
Heteroskedasticity Test		
Chi-sq	df	Prob.
101.2410	100	0.4465

Source: Computation from E-view Output, (2018).

The Table 9 shows that the p value for LM-Statistic is

larger than 5 percent. This denotes that the null hypothesis that there is no serial correlation cannot be rejected. This implies no serial correlation. Also, the result from the table shows that Jarque-Bera statistic for each of the variables and the all variables. The p-values in all cases are larger than alpha value at 5 percent except at third and fourth variable. More so, the heteroskedastic test is based on chi-squared statistic and as it is shown in Table 10, it very large with p value larger than 5 per cent. This implies that residual of this VEC specification exhibit a constant variance at all time. Thus, the VEC specification for LSEP LBLN, LLDR, and LINF, is in tandem with the classical laws.

4.5. Discussion of Result

The study found that in the long run, banks' loan and advance will increase significantly with increase in performance of small scale enterprises. This conforms to the finding of Iloh, et al. (2015). The explanation is that if more credit facility is given to small scale enterprises, there will be a positive turn out rate in their performance. The long run coefficient of lending rate reveals positive and significant on the performance of small scale enterprises. This contradicts the finding of Iloh et al. (2015) but the reason could be as a result of profitable ventures an entrepreneur may likely invest on which could necessitate demand in credit facility irrespective of increase in lending rate. In the long run, a rise in inflation rate exerts a decrease in small scale enterprises' performance. This means that the value of credit facility sourced from bank is reduced by inflation. This is in consonance with the finding of Baumback (1983). The explanation for this is that in an inflationary economy like Nigeria, the real value of credit facility is reduced compare to the nominal value.

5. Conclusion and Recommendation

The study concluded that banks intermediation role through granting of credit facility has a long-run effect on the performance of the small enterprises and this will enhance the Nigerian economy in the long run. This is because the performance of the small enterprises remains the back born of any economy due to the fact that it can guarantee wellbeing of citizens, job creation, availability of goods and services in meeting the needs of citizens and also income generation for entrepreneurs. Also, the performance of the small enterprises help in reduce unemployment, crime in the society and foster socio-economic development especially in the developing countries like Nigeria. The implication of this study is that an increase in the loan and advances in the long-run will promote more productive investment activities to increase capital formation in the country. In view of this, the study recommends that Central bank of Nigeria should adopt appropriate mechanism to control the inflation rate in the economy as this has a great effect on the loan and advance given to the small scale enterprises. Also the lending rate should be reduce and made flexible to encourage accessibility to finance capital. One of the limitations of the study is the use of time series data because it only focus on Nigeria alone, thus further researches in this area should extend their studies beyond the scope of Nigeria by considering different countries and this will further contribute to the gaps in the literature because these studies will be able to employ panel data and test for random and fixed effect.

References

[1] Adama J., Duru, I. U, & Diyoke, K. O. (2017). Role of microfinance banks on employment generation in the grassroots: Evidence from Karu local government area of Nasarawa State, Nigeria. *Asian Journal of Economics, Business and Accounting,* 4 (2), 1-9.

[2] Aigbedion I. M., Anefu-Apochi E., Ezulike C., C., & Gabriel K., M. (2018) The Impact of Small and Medium Scale Enterprises in Nigeria: a Case Study of Abuja Municipal Area Council (AMAC), *International Journal of Advanced Studies in Economics and Public Sector Management 6,(1), 2018*

[3] Babajide, A. K. (2002). "Funding of SME: Sourcing of Funds and Problem Limiting Access. "Paper Presented at the 4th Partners Forum of the Public Practice Section of the Institute of Chartered Accountants of Nigeria (ICAN).

[4] Baumback, C. M. (1983). Problems of macro and small scale enterprises (MSEs). Basic small management. Price Hall Incorp, New Jersy

[5] Dada, R. M. (2014). Commercial Banks' Credit and SMEs Development in Nigeria: An Empirical Review. *International Journal of Research. 1 (8): 305-319*.

[6] Hallam, D., & Zanoli, R. (1993). Error Correction Models and Agricultural Supply Response, *European Review of Agricultural Economics, 20,* 151-166.

[7] Haruna, U., Sulaiman, I., & Isa, T. A., (2017). The Role Financial Institutions in Financing Small and Medium Enterprises in Nigeria. *Asian Journal of Economics, Business and Accounting*, 5 (3), 1-9,

[8] Imoughele, L. E. & Ismaila, M. (2014). The Impact of Commercial Bank Credit on the Growth of Small and Medium Scale Enterprises: An Econometric Evidence from Nigeria (1986-2012). *Journal of Educational Policy & Entrepreneurial Research. 1 (2): 251-261.*

[9] Iloh, J. & Chioke, N. (2015). Commercial Bank Credit Availability to Small and Medium Scale Enterprises (SMEs) in Nigeria. Being a Paper Presented at the *3rd International Conference on Business Law and Corporate Social Responsibility. Held in Bali Indonesia. May 5 – 6.*

[10] Kuwornu. J K. M. (2012). Effect of macroeconomic variables on the Ghanaian stock market returns: A Co-integration Analysis. *Agris on-line papers in economics & informatics IV(2).*

[11] Mamman, A. & Aminu, K. S. (2013). Effects of 2004 Banking Reforms on Loans Financing of Small and Medium Scale Industries in Nigeria. *International Journal of Small Business & Entrepreneurship Research, 1 (3), 44-53.*

[12] Nwosa, P. I. & Oseni, I. O. (2013). The Impact of Bank Loans to SMEs on Manufacturing Output in Nigeria. *Journal of Social Development Sciences 4 (5), 212-217.*

[13] Oke, M. O. & Aluko, O. A. (2015). Impact of Commercial Banks on Small and Medium Enterprises Financing in Nigeria. *Journal of Business & Management. 17 (4), 23-26*.

[14] Omah, I., Durowoju, S. T., Adeoye, A. O. and Elegunde, A. F. (2012). Post Bank Consolidation: A Debacle in the Survival of SMEs in Nigeria ""An Empirical Study". *Australian Journal of Business & Management Research, 2 (8), 1-6.*

[15] Owenvbiugie, R. O. & Igbinedion, V. I. (2015). Role of Finance on the Growth of Small and Medium Scale Enterprises in Edo State of Nigeria. *Journal of Education & Social Research, 5 (1): 241-247.*

[16] Yeboah E. (2017). The impact of finance on grassroots development: Evidence from SMEs in Kwabre East District of Ashanti Region of Ghana. Open Journal of Business and Management, 5, 577-591.

[17] World Bank (2013). *Nigeria – Enterprise Survey.* Washington DC: World Bank