

**Bank Credit Facilities and SMEs' Performance in Nigeria**

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**Abstract.** This paper examined the contributions of bank credit facilities on small and medium scale enterprises (SMEs') performance in Nigeria from 2004 to 2020. The regressor is bank credit facilities measured by bank loans (BOL), bank advances (BOA), and bank overdrafts (BOV) while the regress and is SMEs' performance measured by the contribution of SMEs to GDP. The study controlled for both cost of credits (COC) and deposit rates (DER). The study sourced data from the Central Bank of Nigerian Statistical Bulletin and the World Bank Data Base, 2020. The study used the Robust Regression estimate to test the research hypotheses. The study evidenced that the model has a high predictor power. Again, bank credit facilities vis-à-vis BOL, BOA, and BOV alongside COC and DER exerted high effects on SMP throughout the studied periods. On individual basis, BOL, BOA, and COC are highly significant while COC is insignificant statistically. In terms of direction, BOL, BOA, and DER have direct effects on SMP while COC have indirect effects on SMP. Consequently, the paper concludes that, bank credit extension vis-à-vis BOL and BOA contributes immensely to the performance of SMEs provided that the COC is reduced and that DER is increased. Hence, the study advocates that bank regulators must ensure that all protocols in obtaining BOA should be minimized so as to ensure that BOA increase SMP. Lastly, the Nigerian government should create an enabling environment for SMEs with a view to further deepen the popularity of bank advances.

**Keywords:** Bank Credit Facilities, SMEs' Performance, Nigeria

**Introduction**

Banks are a vital source of credit to firms but more especially to Small and medium-sized businesses (SMEs) that do not have access to capital markets in order to raise funds. Commercial banks close the funding gap that informal or internal sources cannot fill. Traditional theory for a well-functioning market would suggest that a firm's performance and the expected future cash flows that had been adjusted for risks and transaction cost would be factors that should affect credit decisions of commercial banks. However, studies have revealed a number of firms and owner characteristics that may affect banks willingness to extend credit or not to SMEs (Taiwo, Ucheaga, & Achugamonu, 2016). These include firm size, age, gender of the owner/manager, educational level of owner/manager amongst others. While some of these cited socio-demographic characteristics enhance banks decision or willingness to extend credit, others impede their willingness to extend credit to different sectors of the Nigerian economy.

Furthermore, Nigeria's national development plans over the years (1962-1985, 1986-1990, 1991-2000, 2001-2010) have emphasized government-led industrialization through the growth of local manufacturing enterprises since the country's independence in 1960. This was in acknowledgement of the critical role that SMEs play in the government's industrial strategy objectives and overall economic growth. However, SMEs appear to make little contributions to the Nigerian economy in that while SMEs employed over 70% of the industrial labour force, they only produced 10–15% of total industrial production and had a capacity utilization of little more than 30%, reflecting their low productivity. Sanni, Oke, and

Alayande (2020) identified a lack of financial support as the number one limitation in expanding small enterprises in Nigeria since they must pass through lengthy procedure before they can obtain business loans from banks. Sometime, they may be asked to bring hefty collateral security which they do not have. Banks do this to guide against loan default which if not properly guided may result to corporate failure. Again, Aguwamba and Ekiemor (2017) stressed that, poor finance access is the major reason behind SMEs' poor performance in Nigeria.

In relation to bank credit expansion, despite the existence of programmes and policies on financial support for SMEs in Nigeria, very few SMEs receive financial assistance (credit) when they need it. This has constrained the development of their businesses and hence their performance. This may be as a result of banks' unwillingness to give out credit facilities to SMEs. Arguably, banks hold that most owners of SMEs apply for loans do not present acceptable investment or business plan and feasibility study. Within the limits of the authors' defined knowledge, there seems to be few studies on banks' credit extension on SMEs performance in the Nigerian context. Therefore, this study aims to fill this gap, as it seeks to empirically test the role of bank credit to SMEs performance in Nigeria. Specifically, the examined the impact of bank loans, bank advances, bank overdrafts, cost of credits, and deposit rates on SMEs' performance in Nigeria.

The rest segments of this paper cover literature review, research methodology, results and discussions, and conclusions and policy recommendations.

## Literature Review

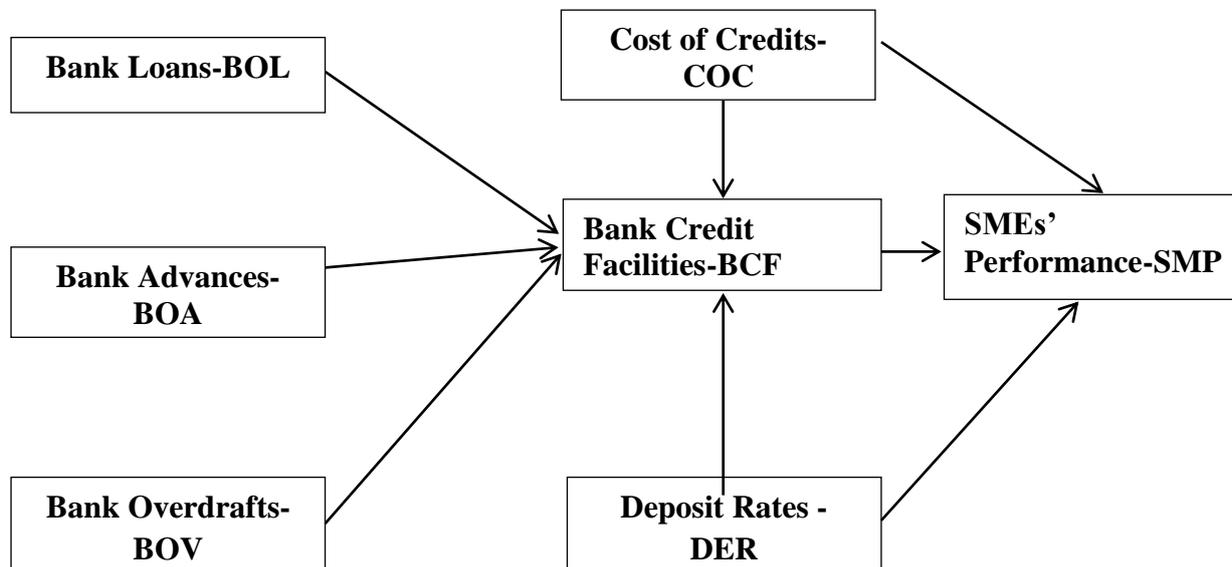
### Conceptual Review

#### *The Concept of Bank Credit*

The term "bank credit" is viewed from different perspectives by different authors. The term "bank credit facility" connotes the extension of fiscal from economic agents with surplus funds to economic agents with deficit funds so as to meet their investment needs. Wikipedia (2020) notes that credit implies a promise by one party to pay another for money borrowed or goods and services received. Generally, bank credits could also be said to be any form of contractual arrangement whereby an economic agent in need of surplus fund (borrower) acquires an asset, funds or some form of financial accommodation from a financier (deposit money bank) with a promise to repay at a predetermined future date. According to Ume et al. (2017), bank credit is the borrowing capacity provided to an individual, government, firm or organization by the banking system in the form of loans. In the same wise, CBN Briefs (2016) defines bank credit as the amount of loans (Short Term Loan, Long-Term Loan, Bridge Loan, Revolving Loan, and Syndicated Loan) and advances (Salary Advance) given by the banking sector to the various economic agents. CBN Monetary Policy Circular (2020) identifies such bank credit facilities to include loans, advances, commercial papers, banker's acceptance, bill discounted, as well as other loss contingencies connected with a bank's credit risk. This definition convey a more holistic definition of the concept in that it takes into account the various components of bank credit and the risk involvement that bank may face in course of given account these credit to economic agent in need of surplus funds to meet their investment needs.

Usually, bank credit is often accompanied with some collateral that helps to ensure the repayment of the loan in the event of default. These credit facilities are offered to individuals, business firms and government agencies so as to enable them used such credit assistance meet up their investments potentials. Thus, in creating credit, a bank has to know how much of its deposits are idle after having satisfied the requirements of the regulatory authorities (i.e. the CBN, NDIC).

Considering the fact that SMEs are instrumental to the Nigerian economy as they create more direct jobs per naira invested than larger businesses, credit extended by banks are therefore instrumental to their performance (Akingunola, Olowofela, & Yunusa, 2018). As a measure of SMEs' performance, this paper considered the contribution of SMEs to the country's GDP.



**Figure 1. Researcher's Compilation**

Source: Researcher's Model (2021)

### Theoretical Underpinning

This study is built on the financial intermediation theory. This theory was formalized by Gurley and Shaw (1967). The theory explains the role of bank credit in an economy. The theory emphasized that the business of financial intermediation in any modern economy is to provide a mechanism to draw financial flows from financially exceeding agents to those having a financial need in the economy. This means that banking institution can influence SMEs' performance through credits extended to the sector. This assertion was reaffirmed by Nzotta (2014) and Nwaru and Okorontah (2014). On this basis, this theory is critical to this study.

### Extant Empirical Studies

On empirical grounds, there have being mixed findings on the impact of bank credit on economic growth. For example, Sanni, Oke, and Alayande (2020) examined the effect deposit money banks credit accessibility on the performance of 198 of SMEs owners/managers in Kwara State, Nigeria. Both descriptive statistics and Partial least square - Structural Equation Model (PLS-SEM) were adopted. The study laid claim that banks credit accessibility and credit related charges (interest) exerted direct significant effects on SMEs' performance.

Using the Pearson correlation analysis, Adelekan, Eze, and Majekodunmi (2019) reported that, bank credit facilities exerted high direct impacts on SMEs in Lagos state. As such, the study reported that government should ensure active SMEs' operation.

Using the multivariate analysis, Akingunola, Olowofela, and Yunusa (2018) reported that credit disbursement have negative impacts on 408 selected SMEs in Ogun State Nigeria. Meanwhile, microcredit exerted direct impacts on business expansion. Therefore,

microfinance banks should endeavour to increase the interest which they charged to SMEs with a view to have more funds.

Chepsang, Iraya and Okiro (2018) evaluated the effects of access to credit on financial performance of SMEs in Nairobi County Kenya from 2012 to 2016. The study revealed a strong and positive relationship between the access to credit and SMEs performance.

Aguwamba and Ekienabor (2017) also examined the linkage between bank lending and growth of Small Scale Enterprises in Nigeria. The study employed ordinary Least Squares (OLS) regression technique to analyse data collected from 1995 to 2012. The result revealed a positive impact of bank lending on small-scale enterprises growth.

Ibrahim (2017) evaluated the role of commercial banks in financing SMEs in Nigeria. Findings of the study revealed that commercial banks loans with the equity scheme have not positively impacted on SMEs finance. In view of this, the study called for the need for Nigerian commercial banks to embrace risk-averse behaviour in respect of loans to SMEs; interest rate should be review for SMEs loans and CBN should increase SMEEIS contribution by commercial banks.

Using the OLS Estimates, Ubesie, Onuaguluchi, and Mbah (2017) reported that bank loans exerted positive minimal impacts on SMEs' performance while cost loans have negative significant impacts on SMEs' performance from 1986 and 2015.

Li (2016) studied the financing sources and difficulties associated with fund outsourcing in China. The study focused specifically on the SMEs in China. The study adopted the primary data methodology. The study laid claim that banks' credit facilities are instrumental to SMEs' performance.

Using the OLS approach, Bandar (2016) examined financial access constraints and the impact on performance of SMEs in Saudi Arabia. The results revealed that some factors ranging from firm specific to macroeconomic impeded SMEs access to finance from the banks and prevent them from developing their businesses. The study recommended that in order to promote easy access to finance from banks to the sector there is need to establish a trusting relationship between the sector and the banks.

### Research Methodology

The ex-post facto research design is used because the study involves an empirical study of the impact of bank credit on SMEs' performance. Data utilized from this study is derived from secondary source. In achieving this, data were obtained from the Central Bank of Nigeria Statistical Bulletin, World bank data base, Journal, newspapers, magazines, and internet services. The restriction of the study to secondary data is anchored on the belief that primary data cannot quantitatively show the trends in Bank Credit facilities and SMEs' performance in Nigeria from 2004 to 2020.

Furthermore, the study adopted the Robust Regression since it accounts for variables perturbation unlike Ordinary Least Square.

### Model Specification

Based on the literatures discussed, the model for this study contains variables attributed in the research objective, questions and hypothesis. These specifications are:

$$SMP = F(BOL, BOA, BOV, COC, DER) \quad (1)$$

Where:

SMP	=	SMEs' Performance
BOL	=	Bank Loans
BOA	=	Bank Advances
BOV	=	Bank Overdraft
COC	=	Cost of Credits

DER = Deposit Rate

The linear function in the equation 1 above shows that SMP is a function of BOL, BOA, BOV, COC, and DER. Econometrically, the model is restated as:

$$SMP = \beta_0 + \beta_1BOL + \beta_2BOA + \beta_3BOV + \beta_4COC + \beta_5DER + \mu \quad (2)$$

Where:

$\beta_0$  = Intercept

$\beta_1$  to  $\beta_5$  = Coefficient of the independent variables or parameters

$\mu$  = Stochastic variable/error term.

To ensure that the issues of outliers are solved, equation two above was normalized.

**Table 1. Operationalization of Study Variables**

S/N	Code	Variable	Formula	Nature of Variable	Expected Sign
1.	BOL	Bank Loans	Annual Bank Loans	Independent	Positive
2.	BOA	Bank Advances	Annual Bank Advances	Independent	Positive
3.	BOV	Bank Overdraft	Annual Bank Overdraft	Independent	Negative
4.	COC	Cost of Credits	Annual Lending Rate	Independent	Negative
5.	DER	Deposit Rate	Annual Deposit Rate	Independent	Positive
6.	SMP	SMEs' Performance	Proportion of SMEs contribution to GDP.	Dependent	Nil

Source: Researcher's Compilation (2022)

The paper expects that BOL, BOA, and DER will influence SMP positively while both BOV and COD will influence SMP negatively.

## Results and Discussion

### Data Analysis

The data under investigation was analysed using descriptive statistics and Pearson Correlation Matrix. They stated thus:

**Table 2. Summary of Descriptive Statistics**

	SMP	BOL	BOA	BOV	COC	DER
Mean	30.30611	15590.31	145.7944	32.59556	16.17222	8.922222
Maximum	95.65000	53628.09	822.7000	130.8800	19.20000	13.70000
Minimum	10.75000	1065.580	0.000000	3.170000	11.50000	4.200000
Std. Dev.	24.41556	16785.70	222.9198	34.68184	1.804506	2.604195
Observations	18	18	18	18	18	18

Source: E-Views 9 (2022)

Table 2 above revealed that the study was conducted over a period of 18 years spanning from 2004 to 2021. The result further reported that SMP, BOL, BOA, BOV, COC, and DER are 30.30611, 15590.31, 145.7944, 32.59556, 16.17222, and 8.922222. Meanwhile, SMP, BOL, BOA, BOV, COC, and DER fluctuated by 24.41556, 16785.70, 222.9198, 34.68184, 1.804506, and 2.604195. This reveals that majority of the study variables did not deviate much from their mean values.

Comparably, BOL estimated at 15590.31 and 1065.580 have the maximum and minimum values while DER estimated at 8.922222 has the lowest maximum and minimum values.

**Table 3. Summary of Descriptive Statistics**

	SMP	BOL	BOA	BOV	COC	DER
SMP	1.000000					
BOL	0.712877	1.000000				
BOA	-0.230669	-0.377085	1.000000			
BOV	-0.135383	-0.030669	0.247614	1.000000		
COC	-0.870241	-0.406994	0.135600	-0.076934	1.000000	
DER	0.377316	-0.378380	0.374311	0.038124	0.020884	1.000000

Source: E-Views 9 (2022)

The correlation result above evidenced that BOL correlated with SMP on a direct strong note since its coefficient value is greater than 70% and is positively signed. Meanwhile, COC correlated with SMP on a direct strong note since its coefficient value is greater than 70% and is negatively signed. However, BOV correlated with SMP on an indirect weak note since its coefficient value is less than 30% and is negatively signed. More so, DER correlated with SMP on a direct weak note since its coefficient value is less than 30% and is positively signed. On the overall, all the regressors reported low correlation. This signals that the possibilities of multi-collinearity issues are few in the series.

### Regression Result

The study was patterned after the Robust Regression result. The regression result is therefore presented in Table 4 below.

**Table 4. Regression Results (Logged Form)**

Dependent Variable: SMP					
Method: Robust Least Squares					
Date: 05/23/22 Time: 22:34					
Sample: 2004 2021					
Included observations: 18					
Method: M-estimation					
M settings: weight=Bisquare, tuning=4.685, scale=MAD (median centered)					
Huber Type I Standard Errors & Covariance					
Variable	Coefficient	Std. Error	z-Statistic	Prob.	
C	3.893671	0.950595	4.096036	0.0000	
BOL	0.825084	0.240432	3.431676	0.0006	
BOA	0.642152	0.284635	2.256058	0.0241	
BOV	-0.119766	0.272838	-0.438964	0.6607	
COC	-0.799450	0.199782	-4.001608	0.0001	
DER	0.110888	0.063930	1.734521	0.0828	
Robust Statistics					
R-squared	0.645409	Adjusted R-squared		0.614330	
Rw-squared	0.672768	Adjust Rw-squared		0.672768	
Akaike info criterion	20.01808	Schwarz criterion		32.06634	
Deviance	3485.278	Scale		15.38524	
Rn-squared statistic	18.89765	Prob(Rn-squared stat.)		0.002008	
Non-robust Statistics					
Mean dependent var	30.30611	S.D. dependent var		24.41556	
S.E. of regression	26.03027	Sum squared resid		8130.897	

Source: E-Views 9 (2022)

The robust  $R^2$  result above stood at 0.672768 (67.28%) signalling the model has a high predictor power. This was reaffirmed by the high Adjust  $R^2$ -squared value. Again, the intercept denoted as C indicates that, if the other regressors are deemed constant, bank credits facility will still not deter SMP instead it will still improve SMP significantly. Again, the Prob.( $R^2$ -squared stat.) estimated at 0.002008 signals that the model is statistically significant on the overall. By implication, bank credit facilities vis-à-vis BOL, BOA, and BOV alongside COC and DER exerted high impacts on SMP throughout the studied periods. This heart-warming result is as expected. Specifically, the individual results are tested below:

**Table 5. Summary of Hypotheses Testing**

Testable Form	P-Value	Decision Rule	Conclusion
$BOL \neq SMP$	0.0006	Accept $BOL \neq SMP$ if its p-value is >5%, otherwise reject it	Reject $BOL \neq SMP$
$BOA \neq SMP$	0.0241	Accept $BOA \neq SMP$ if its p-value is >5%, otherwise reject it	Reject $BOA \neq SMP$
$BOV \neq SMP$	0.6607	Accept $BOV \neq SMP$ if its p-value is >5%, otherwise reject it	Accept $BOV \neq SMP$
$COC \neq SMP$	0.0001	Accept $COC \neq SMP$ if its p-value is >5%, otherwise reject it	Reject $COC \neq SMP$
$DER \neq SMP$	0.0828	Accept $DER \neq SMP$ if its p-value is >5%, otherwise reject it	Accept $DER \neq SMP$

Note:  $\neq$  means not significant

Source: Researcher Compilation Based on E-Views 9 Output (2022)

The above result affirmed that BOL, BOA, and COC are highly significant while BOV is insignificant statistically. This signals that BOL, BOA, and COC is in support of the assertion of the alternative hypothesis of existence of high statistical significance while BOV supports the assertion of the null hypothesis of no significance.

### Result Discussion and Implications

The regression analysis further revealed that bank loans (BOV) and advances (BOA) exerted positive (beta=0.825084 and 0.642152) significant (p-value=0.0006 and 0.0241) effect on SMP. This signals that a unit rise in BOV and BOA will increase SMP by 82.51% and 64.22% respectively. This further revealed that both BOV and BOA are highly instrumental to SMP. This is in line with the prior expectation stated earlier and also supports the position of the Financial Intermediation Theory. However, BOV exerted negative low effects on SMP. This signals that BOV has a negligible effect on SMP. Meanwhile, COC has high deterring effects on SMP. This signals that a higher COC lowers the performance SMEs to a high extent. However, DER has negligible though positive effects on SMP.

### Conclusions and Policy Recommendations

This paper was targeted at examining the contributions of bank credit facilities on SMEs' Performance in Nigeria. The study used the Robust Regression estimate to test the research hypotheses. The study evidenced that the model has a high predictor power and if the other regressors are deemed constant, bank credits facilities will still not deter SMP instead it will still improve SMP significantly. Again, bank credit facilities vis-à-vis BOL, BOA, and BOV alongside COC and DER exerted high effects on SMP throughout the studied periods. Meanwhile, on individual basis, BOL, BOA, and COC are highly significant while BOV is insignificant statistically. In terms of direction, BOL, BOA, and DER have direct effects on SMP while COC have indirect effects on SMP. On this note, the paper

concludes that, bank credit extension vis-à-vis BOL and BOA contributes immensely to the performance of SMEs provided that the COC is reduced and that DER is increased. Hence, the study advocates that:

1. Bank regulators must ensure that all protocols in obtaining BOA should be minimized so as to ensure that BOA increase SMP.
2. The Nigerian government should create an enabling environment for SMEs with a view to further deepen the popularity of bank advances.
3. Efforts should be made to reconsider bank overdraft facilities since sometime reduce SMP significantly.
4. Regulatory authorities should ensure that the cost of loans should be reduced as this deters SMP.
5. Banks should ensure that DER is increased as this will help increase SMP.

### **Contribution to Knowledge**

The study has contributed to existing body of knowledge in the following ways:

1. The study provided a more recent, comprehensive and up-to-date approach on the construct.
2. The study developed a holistic approach via the use of a comprehensive model that was able to capture the nexus between the studied variables.
3. The study reaffirmed the significance of bank loans and advances, bank overdraft, commercial papers on the SMP.

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