

Impact of Commercial Banks on Small and Medium Enterprises Financing In Nigeria

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Abstract: *This study examines the impact of commercial banks in financing small and medium scale enterprises (SMEs) in Nigeria between 2002 and 2012. A sample of ten (10) commercial banks is drawn for the study and individual bank data and macroeconomic time series annual data were collected. Using panel data regression analysis, the results reveal that commercial bank has significant impact on SMEs' financing as deduced from the results of constant effect, fixed effect and random effect models which show that commercial banks credit to SMEs, the ratio of credit to SMEs to total credit in the economy and equity of commercial banks explain a substantial proportion of changes that arise in SMEs' financing. This study suggests that commercial banks are capable of making SMEs grow.*

Keywords: *Small and Medium Enterprises, Commercial Banks, Financing, Panel Data Regression, Bank Equity*

I. Introduction

Small and Medium Enterprises (SMEs) have been recognised as driving force for economic growth in any nation. Empirical evidences have shown that they contribute to employment, alleviate poverty and increase productivity level in a nation. In recognition of the role of SMEs in the economic growth process of Nigeria, government has taken concerted efforts to foster the growth of SMEs and also develop entrepreneurship. SMEs are of necessity to a nation's industrialization process. One foremost way of promoting SMEs is by having easy access to finance. Finance is of high importance to the growth of SMEs. Afolabi (2013) noted that a major gap in Nigeria's industrial development process in the past years has been the absence of a strong and virile SMEs sector attributable to the reluctance of banks especially commercial banks to lend to the sector.

Commercial banks through their intermediation role are meant to provide financial succor to SMEs. Prior researchers have identified lack of finance as a threat to the performance of SMEs. For SMEs to perform their role in the economy, they need adequate funds in terms of short and long-term loans (Ohachosim, Onwuchekwa & Ifeanyi, 2013). Adequate financing of SMEs is paramount to their survival, as it has been recorded in literature that financial constraint is one of the main reasons SMEs fail in Nigeria. Osoba (1987) argued that financing strength is the main determinant of small and medium enterprises growth in developing countries.

There is no gainsaying that finance would boost the performance of SMEs if adequate and optimally utilized. The dearth of funds in these businesses is capable of crippling their operations. Lack of funding for SMEs creates obstacles in allowing them contribute to economic growth and development. Onugu (2005) ranked access to finance as the second problem faced by SMEs in Nigeria. Commercial banks are often reluctant to lend to SMEs because of the perceived risky nature of SMEs by them. Analysis of the annual trend in the share of commercial bank credit to small-scale industries indicates a decline from about 7.5 per cent in 2003 to less than 1% in 2006 and a further decline in 2012 to 0.14 per cent (Sanusi, 2013). The decline shows that commercial banks have less preference to lend to SMEs.

The main identified gap that necessitated this study is the perceived problem of inadequate financing from commercial banks in Nigeria to SMEs. Therefore, this study aims at investigating the impact of commercial banks on SMEs financing in Nigeria as well as specifically appraising the impact of the equity of selected banks on SMEs financing; hence, a panel data regression approach is followed so as to incorporate the cross-sectional data on equity of the banks drawn into the sample. The period under review is between 2002 and 2012. The rest of this study is segmented as follows section two reviews related empirical studies, section three discusses the materials and method, section four discusses the findings and section five focuses on conclusion and recommendations.

II. Review of Related Empirical Studies

Mamman and Aminu (2013) assessed the effect of 2004 banking reforms on loan financing of SMEs in Nigeria. A sample size of 500 was randomly chosen and chi-square test provided analysis on the survey data. The study indicated that there is no significant effect of 2004 banking reform on loan financing of SMEs in Nigeria and suggested that there are some constraints which restricted access to loans from the banks for SMEs

in Nigeria. Aliyu and Bello (2013) examined the contribution of commercial banks to the growth of SMEs in Nigeria between 1980 to 2009. Using ratio analysis and trend analysis, it was discovered that commercial banks contribute to financing SMEs but their contribution has declined as the government through CBN directives abolished the mandatory bank's credit allocations.

Nwosa and Oseni (2013) examined the impact of banks loan to SMEs on manufacturing output in Nigeria for the period spanning 1992 to 2010. Employing error correction modeling technique, the study deduced that bank loans to the SME sector had significant impact on manufacturing output both in the long and short run. Omah, Duruwoju, Adeoye and Elegunde (2012) examined the impact of post-bank consolidation on the performance of SMEs in Nigeria, with special reference to Lagos State. A sample size of 50 was drawn from the supra-population of the study within Ikeja Local Government in Lagos State. Applying mean, standard deviation and coefficient of variation in its data analysis, the study revealed that SMEs do not have better access to finance through banks, due to neo-reorganisation in banks as a result of post-bank consolidation and SMEs do not have absolute rapport with the financial institutions due to their financial background in Nigeria.

Ahiawodzi and Adade (2012) examined the effect of access to credit on the growth of SMEs in the Ho Municipality of Volta region of Ghana by using both survey and econometric methods. The survey involved a sample of 78 SMEs in the manufacturing sector. Both the survey and econometric results showed that access to credit exerts a significant positive effect on growth of SMEs in the Ho Municipality. Obamuyi (2011) compared the performance of loans granted to SMEs by banks with that of micro-credit institutions in Nigeria, using Ondo State as a case study. Analysing through descriptive statistics, the study revealed that the average repayment rate for banks was 92.93% and 34.06% for micro-credit schemes; hence, suggested that banks performed at much higher levels than micro-credit schemes.

Chiou, Wu and Huang (2011) examined how diversified operations of banks impact their loans to SMEs by using panel data on 28 banks. The result indicated that as aggressive derivatives traders, the impact of its total assets on SMEs loans is positive at 1% significance level and credit guarantees positively impact SME loans at 1% significance level, implying that large banks are encouraged to make loans to SMEs through the assistance of the credit guarantees scheme. Amonoo, Acquah and Asmah (2003) established whether there is a relationship between interest rates and the demand for credit as well as interest rates and loan repayment by the poor and the SMEs in Ghana. The results showed a negative relationship between interest rates and demand for credits as well as interest rates and loan repayment. The study suggested that lowering interest rates would increase the poor and SMEs demand for credit and loan repayment at banks and non-bank institutions which can be achieved through the amendment of the fiscal policy by the government.

III. Materials and Methods

This study examines the impact of commercial banks in financing SMEs using a sample of 10 banks out of the 21 commercial banks presently operating in Nigeria. It assumes that commercial banks do not have significant impact in financing SMEs. The selected banks are drawn into a panel dataset and data were sourced from the annual financial statements of the banks and CBN Statistical Bulletin. This study adopts panel data regression analysis which presents pooled regression (constant effect) estimates, fixed effect estimates and random effect estimates.

3.1 Model Specification

The model for this study assumes an underlying relationship between some commercial banks variables that can influence or determine the level of their finance on small and medium scale enterprises of a nation. The model specifies the dependent variable measured with Small and Medium Enterprises' Finance (SMEF) as dependent on Commercial Bank Credit to SMEs (CC), Commercial Bank Equity (EQ) and ratio of Commercial Bank Loan to SME to Total Credit in the Economy (SMETC), representing the independent variables. The functional relationship is presented as:

$$SMEF = f(CC, EQ, SMETC)$$

The model is expressed in econometric equation as:

$$SMEF = \beta_0 + \beta_1 CC + \beta_2 EQ + \beta_3 SMETC + \mu \dots\dots\dots (1)$$

β_0 – Intercept of the model/Constant parameter; $\beta_1, \beta_2, \beta_3$ – Coefficient of the independent variables/Regression parameters; μ - Stochastic/Error term

In order to bring the data of both the dependent and independent variables to a comparative level, their logarithm is arrived at. The logarithm form of the model becomes:

$$\log SMEF = \beta_0 + \beta_1 \log CC + \beta_2 \log EQ + \beta_3 \log SMETC + \mu \dots\dots\dots (2)$$

The theoretical expectations in the model are $\beta_1, \beta_2, \beta_3 > 0$ (positive) i.e. an increase in either β_1, β_2 or β_3 leads to an increase in SMEF.

IV. Discussion of Findings

The result of the panel data regression analysis is presented in three different stages to show the behavior of the three effects respectively i.e. Constant Effect, Fixed Effect and Random Effect. The constant effect otherwise known as pooled Ordinary Least Square (OLS) regression does not create distinction among the banks, Fixed Effect allows for heterogeneity among the individual banks and it is time-invariant while Random Effect is time-variant. The significance of the parameters in the model and the model in entirety is determined using their respective probability value (p-value). The condition for statistical significance at 5% significance level is that p-value must be less or equal to 0.05.

Table 1: Constant Effect Estimates

Variable	Coefficient	P-value
C	10.35450	0.0000*
CC	0.019193	0.2726
EQ	-0.016566	0.3461
SMETC	0.438452	0.0000*

$R^2 = 0.958082$ F-statistic = 746.6397 P-value (F-statistic) = 0.000000*

*denotes significance at 5% significance level

Source: Authors' computation

Table 1, the model can be expressed mathematically in regression line as:

$$SMEF = 10.35450 + 0.019193CC - 0.016566EQ + 0.438452SMETC + \mu$$

Table 2: Fixed Effect Estimates

Variable	Coefficient	P-value
CC	0.059734	0.0247*
EQ	0.024009	0.4284
SMETC	0.024009	0.0000*

$R^2 = 0.961043$ F-Statistic = 1097.790 P-value (F-statistic) = 0.000000*

*denotes significance at 5% significance level

Source: Authors' computation

Table 2, the model can be expressed mathematically in regression line as:

$$SMEF = 0.059734CC + 0.024009EQ + 0.024009SMETC + \mu$$

Table 3: Random Effect Estimates

Variable	Coefficient	P-value
C	10.39853	0.0000*
CC	0.006054	0.0246*
EQ	-0.005325	0.0477*
SMETC	0.440194	0.0000*

$R^2 = 0.955290$

*denotes significance at 5% significance level

Source: Authors' computation

Table 3, the model can be expressed mathematically in regression line as:

$$SMEF = 10.39853 + 0.006054CC - 0.005325EQ + 0.440194SMETC + \mu$$

The estimates of the constant effect show that the constant parameter has a positive value with a coefficient 10.35450; hence, SMEs financing by commercial banks by 10.35450 if all independent variables are held constant. Meanwhile, the coefficients of the independent variables show varying relationships with the dependent variable. Commercial credit to SME (CC) and the ratio of credit to SME to total credit in the economy (SMETC) show a positive relationship with SMEF while the Equity of commercial banks (EQ) shows otherwise. A unit increase in the CC causes 0.019193 units increment in SMEF and a unit increase in the EQ leads to reduction in the financing by 0.016566 units while a unit increase in SMETC leads to a rise in SMEF by 0.438452 units. The relationship existing between SMEF and each of the independent variables conforms to the theoretical expectation with the exemption of EQ. From the fixed effect, all the independent variables have direct (positive) relationship with the SMEF. A unit increase in the CC, EQ and SMETC leads to rise in SMEF by 0.059734, 0.024009, 0.504717 units respectively. The relationship existing between SMEF and each of the independent variables is in consonance to the theoretical expectation. The result of random effect was also in tandem with that of the constant effect. The constant parameter has a positive value of 10.39853; hence, financing to SMEs by commercial banks increase by 10.39853 if all independent variables are unchanged. CC and SMETC show a positive relationship with SMEF in agreement to the theoretical expectation while the EQ shows a negative relationship which is in conflict to the theoretical expectation. A unit increase in the CC and

SMETC cause increment in SMEF by 0.006054 and 0.440194 units respectively and a unit increase in EQ causes reduction of 0.005325 units in SMEF.

The coefficient of multiple determination (R^2) shows a value of 0.958082, 0.961043 and 0.955290 for the constant, fixed and random effects respectively. This therefore indicates that the all the model accounts for approximately 96%. This portends that CC, EQ and SMETC explains 96% of variation in SMEF and the remainder of 4% is accounted for by the stochastic term or factors not specified in the model. This shows a strong linear relationship between the SMEF and the independent variables; thus confirming that commercial banks have significant impact on SMEs. The F-statistic value in the results of constant effect and fixed effect is very high with both having a probability value of 0.000000. This shows that the model is statistically significant in explaining changes that may arise in SMEF and adequate to capture the impact of commercial banks on SMEs financing in Nigeria.

V. Conclusion

This study evaluates the impact of commercial banks on small and medium scale enterprises in Nigeria. A dataset comprising macroeconomic time series data and individual data of 10 commercial banks was built. The empirical results suggest that commercial banks have significant impact on SMEs and their financing regardless of the general perspective that commercial banks shy away from lending to the SMEs. This confirms that commercial banks still remain an important source of finance for SMEs and an avenue through which SMEs can grow. In order for SMEs to enjoy greater benefits, they should see bank credit as a source of finance to be utilized for the expansion of their business. Government should encourage commercial banks to lend to SMEs by providing incentives and persuade the banks to give preference to SMEs. Also, SMEs on their own part should keep adequate financial accounts of their business operations as this is one of the pre-requisite in securing loans from banks.

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