International Journal of Small Business and Entrepreneurship Research

Vol.3, No.4, pp.22-31, July 2015

Published by European Centre for Research Training and Development UK (www.eajournals.org)

ANALYSIS OF IMPACT OF CREDIT ON THE PERFORMANCE OF Smes IN SOKOTO METROPOLIS OF SOKOTO STATE OF NIGERIA

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ABSTRACT: *This paper analyses the impact of credit on the performance of SMEs in Sokoto metropolis the capital city of Sokoto State of Nigeria. This research is important in the sense that it may provide feedback on government programs and policies on SMEs finance. The research uses primary data collected from 294 respondents out of a population of 1710 registered SMEs in Sokoto metropolis using the random sampling technique. Regression analyses were used to analyse the data. The result shows credit is a major determinant of employment generation of SMEs. It is therefore recommended that is that policy makers should continue to formulate policies that will compile banks to increase credit to SMEs and reduce interest rate on the loan.*

KEYWORD: Credit, Performance, Small and Medium Scale Enterprises, Return on Assets, employee total assets ratio.

INTRODUCTION

SMEs are believed to be the engine room for the development of any economy because they form the bulk of business activities in most growing economies. They dominate the private sector landscape in virtually every country where market economies flourish. These SMEs are the major source of economic growth, job creation, innovation, exports and other key development indicators.

The survival of SMEs is considered crucial to the growth of any economy in the world. Available records show that SMEs occupies 60 to 80% of the global economy (Nnanna, 2002). The success of SMEs in countries of South Asia is a very good example of the importance of SMEs to the economy. Some of these Asian countries like Malaysia, Taiwan, Thailand, Indonesia and Singapore whose economies were in shambles for the past three decades, are now among the fastest growing economies in the world because of their viable SMEs . Global statistical records show that SMEs account for 98 % of all private companies in the global market and contribute not less than 30 % of the global GDP and are responsible for 50% of the global labour force (Nnanna, 2002).

In America, the small business sector, which has about 22 million enterprises, is generating more than half of the country's GDP, employing about 53 % of the total private workforce and is responsible for creating majority of all new jobs. Out of about 5 million jobs created in the year 2000, Small Scale Industries and Business Enterprises produced an estimated 62 %.

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

In China, the SMEs which is called Township Enterprises are responsible for the employment of well over 50 % of the labour force. Employment in this sector increased from 28 million to 96 million in 1991 (Nnana, 2002). Similarly, in India, total industrial output had reached US $192.93 billion with the small-scale industries accounting for US $108.18 billion (Nnana, 2002).

In Kenya, micro and small scale entrepreneurs have contributed greatly to the national objective of creating employment opportunities, training entrepreneurs, generating income and providing a source of livelihoods for the majority of low income households in the country. These enterprises accounted for 12-14% of GDP (Kombo, *et al* 2011).

In Nigeria the sector has made some contribution to the economic development of the nation, but the contribution is far below the level achieved by countries like India, Malaysia, Indonesia and the United State of America. Despite that, , SMEs in Nigeria employ about 60 % of the labour force, they contribute only 35 % of industrial output and account for 10 % of industrial exports (Nnana, 2002).

The formal financial system in Nigeria provides service to 35% of the economically active population while the remaining 65% are excluded from access to financial services. These 65% are often served by informal financial sector (CBN, 2005). Thus, access to finance has remained the major problem of SMEs in Nigeria.

This low contribution of SMEs to the development of the Nigeria economy has been attributed to lack of access to credit from the formal financial system. A lot of literature has underscored the importance of credit for the development of SMEs. This may be the reason why various governments in Nigeria have established institutions and programs to provide the SMEs with credit.

There is the need to investigate whether credit when accessed improves the performance of the SMEs. This research examines the impact of credit on the performance of SMEs in Sokoto metropolis, the capital city of Sokoto state of Nigeria, specifically the research wants to find answers to the following question: Does the volume of formal credit affect SMEs return on asset?, Does the volume of formal credit impact on return on sales? And does the volume of the formal credit impact of the number of employees of the SMEs?

This research is important as it may provide feedback on government credit schemes on SMEs in Sokoto state, similarly the research will help in formulating future policies that may improve the condition of the people of Sokoto State. The choice of Sokoto metropolis is against the background that Sokoto state is considered as the poorest state in Nigeria with about 81% of its population below the poverty line according to the report of the National Bureau of Statistics (NBS, 2012). The paper is divided into six sections. Section one is introduction. Section two reviews the literature; section three examines the theoretical framework and states the research hypotheses. Section four is the methodology, section five is results and discussion; and section six concludes the paper and makes recommendations.

LITERATURE REVIEW

The literature review covers the concept of SMEs, impact of formal credit for the performance of SMEs and the theoretical framework.

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

Concept of Small and Medium Enterprise

There are so many definitions of Small and Medium Enterprise. SMEs have no globally accepted definition. It is defined by different scholars and in different countries. In some countries SMEs are defined in term of their annual turnover and number of employees. In other countries SMEs are defined in term of their industry and nature of their businesses. For the purpose of this paper the definition of Small and Medium Industry Eequity Investment Scheme will be adopted that is to say SMEs are those enterprises with a maximum asset of ₦200,000,000.00 excluding land and working capital with the number of employees not less than 10 and not more than 300.

Impact of Formal Credit on the Performance of SMEs

The goal of Government intervention in financing SMEs is to enhance their performance. This is because SMEs are viewed as an important engine for employment generation and economic growth. Bank loan and other government financial support are expected to increase the performance of SMEs by increasing their profit, turnover and employment generation. A research by Joe and Almas (2008) that evaluate the effect of credit guarantee on SMEs performance in Korea found that guarantee frequency enable guaranteed firms to achieve good performance. The research concludes that credit guarantee satisfied partially its goal of alleviating SMEs difficulties in acquiring finance which also help SMEs in generating more employment. Contrary to the findings in a research by Maseco *et al* (2011) which revealed that only 7% of the SMEs in their survey graduate into large companies after receiving government financial support. This is to say that enterprises in the research had not developed to the expectation even when they receive government financial support.

A research by Rabbani and Sulaiman (2005) on Brac Banks's SMEs lending in Bangladesh revealed that the SMEs in the survey creates 16.4% new jobs after receiving a loan from the bank. This indicates that the credit from the bank has impacted on the performance of the SMEs in the survey through an increase in their employment generation. Other research by Kadiri (2012) found that credit received by SMEs in the study is positively related to the SMEs ability to create employment. The R^2 of the regression is 0.81, showing that about 81% of the variation in SMEs ability to create employment is responsible by the seven variables in the equation including credit. According to the research credit is the most outstanding factor that influences SMEs ability to create employment. The result in the equation has a significant value of 0.0000 which is near 100% correct that finance is a determinant of employment generation by SMEs.

The study by Hunton *et al* (2003) examined the longitudinal impact of Enterprise Resource Planning (ERP) adoption on firm performance by matching 63 firms that adopted ERP with peer firms that had not adopted ERP systems . Results indicate that the return on assets (ROA), return on investment (ROI), and Return on sales (ROS) were significantly better over after a 3-year period for adopters, as compared to non adopters .

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

Theoretical framework and research hypotheses

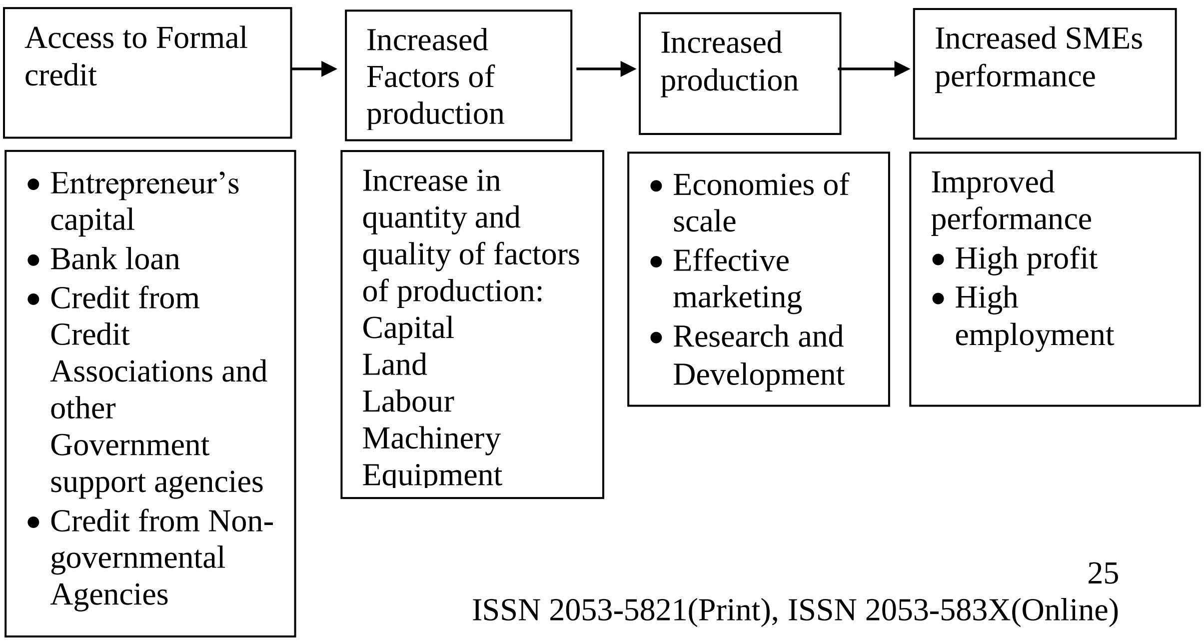
This section reviews the theoretical framework for the study and develops the research hypotheses. The life cycle model and the pecking order theory are the two theoretical frameworks adopted for this research.

The life-cycle model states that changes in the firm's development are parallel to the changes in its access to finances and changes in its capital structure. Timmons (2004) observes that small, young firms tend to draw capital from internal sources, personal savings, informal investment and family and friends. As the firm ages, outside investors can observe the firm's track record and examine its credit worthiness over time in developing a reputation, Firms alternate the problem of asymmetric information and have improved access to short term sources of funding such as trade credits and bank overdraft facilities. In order to raise sufficient funds to meet capital investment need, the firms may increasingly source finances from financial institutions and debt levels increase as the firm gets larger and older. As retained earnings accumulate over time the firms borrowing requirement will decline and debt as a percentage of total assets decline too (Bhaind and Lucy, 2002).

The packing order theory states that firms prioritize the source of financing from internal sources (cash flow and entrepreneurs' own capital) and external sources according to relative availability and opportunity cost. For most firms the internal sources are always not available or insufficient to undertake the required level of transaction for profitable projects. This call for the external finance to fill the gap (Olutunla and Obamuyi, 2008). If the sum of money borrowed is invested by the firm and the investment has proved to succeed additional assets are created which can again be used as security for further borrowing. From the above it can be assumed that access to credit is expected to positively influence the availability of factors of production such as land, labor capital and equipment subject to the constraint of asymmetric information and high cost of capital (Olutunla and Obamuyi, 2008). The interest rate is expected to be inversely related to volume of credit of a firm. These theories will therefore guide this research work.

In view of these, the following model was adapted from the work of Olutunla and Obamuyi (2008) with some modifications.

Figure 1: Access to credit and the performance of SMEs.



ISSN 2053-5821(Print), ISSN 2053-583X(Online)

From the model above, access to formal credit is expected to positively improve the availability and quality of factors of production such as land, labour, capital, machinery and equipment. This is expected to improve production by improving the economy of Scale effective marketing and research and development. This is in turn expected to improve the performance of SMEs by improving profit and the number of employees of SMEs

Hypotheses

The research formulates three hypotheses in order to achieve the research objectives:

1. There is no significant positive relationship between the volume of SMEs formal credit and Return on Asset (ROA) of SMEs.

2. There is no significant positive relationship between the volume of SMEs credit and the number of employees of SMEs.

METHODOLOGY

This section explains the methodology of the research. It explains the population, sample size and the sampling techniques for the study. It also examines the measure of performance for the study and specify the research model for analysing the results of the study.

Population of the study

The population of registered SMEs in Sokoto State stands at 1710 as of December, 2009 according to Sokoto State Ministry of Commerce and Industry.

Sample and Sampling Technique

Two hundred and ninety four SMEs were randomly selected from the population of the registered SMEs in the metropolis. Even though, the use of the technique experience some limitations as some of the registered enterprises on the list were no more operating, and others that operates did not register. Many other enterprises also have not been keeping records of their transactions. Therefore, only those that operate and keep records were sampled. These SMEs met the definition by Small and Medium Industry Equity Investment Scheme and have been in operation for two or more years and most operate for two or more years.

Data collection

A structured questionnaire was developed for data collection. Questions were asked about the amount of loan collected, total asset of the enterprise, profit, turnover number of employees training attended, ownership structure and level of education of the entrepreneur. The data were collected for 5 year period from 2007 to 2011.

Measure of performance for SMEs

A number of approaches are used to measure the performance of SMEs. According to Evans (2001), there are the goal approach, systems approach, resource approach, stakeholder approach and competitive approach. The goals approach measures the extent an organization attains its goal while the systems approach measures how well and effective the organizational entities work. The research approach assesses the ability of the organization in obtaining its resources. Stakeholders approach and competitive value approach evaluate the performance of an organization based on its ability to meet the needs and expectations of its external stakeholders including government, customers, suppliers and competitors.

These measures are categorized into two, the financial measures and the non financial measures of performance. The financial measures include profit, revenue, return on investment, return on sale, and return on equity. The non financial measures asses how well the external stakeholders are satisfied for the government, the performance of SMEs is measured by the level of employment in the sector on the customer, the performance of the firm is measured by the quality and availability of its products or services.

Lee (1987) stressed the use of a composite measure of business performance derived from various indices of financial profitability. He indicates that composite measure of financial profitability such as return on equity, return on assets, return on investment and return on sales would be a relatively comprehensive criterion to measure the performance of SMEs. Similarly Pasanon (2004) is of the view that the most frequently used measures on SMEs growth has been a change in the firm's turnover and change in the number of employees.

For the purpose of this paper a composite measure of SMEs performance that include profit as a ratio of total asset (return on asset) and number of employees as a ratio of total asset of SMEs were used. The use of the ratio is to take care of the size of the SMEs in the study. This is to make sure each variable is represented in the actual role it plays to influence the performance of SMEs. Using variables like number of employees can be justified because one of the major objectives of government intervention in funding SMEs is for the sector to provide employment opportunities to millions of unemployed Nigerians. Using profit is also because the aim of each entrepreneur of establishing a business is to make profit and making high profit to them means the business is performing well.

Techniques for data analysis

The study employs two OLS regression analyses to test the relationship between performance of SMEs and the volume of SMEs credit. In the first regression, profit as a ratio of total asset (Return on Asset) is the dependent variable and volume of SMEs credit is the independent variable. In the second regression, number of employees as a ratio of total asset is the dependent variable and volume of SMEs credit is the independent variable.

Model specifications

To test the performance of SMEs three models were used

Test of performance using profit as a ratio of total asset

$PERF = \alpha + \beta_1 CRD + e$

Where

PERF = the performance of SMEs represented by SMEs profit as a ratio of total asset and the SMEs number of employees as a ratio of total asset.

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

α = autonomous constant term representing the performance of SMEs that is not influenced by volume of SMEs formal credit.

β_1 = parameter of the model

CRD = the volume of SMEs formal credit.

e= error term

RESULTS AND DISCUSSIONS.

The result is in two categories the descriptive statistic result that descrive the personal and demographic characteristics of the responding entrepreneurs and the enterprises and the regression result that test the research hypothesis

Descriptive statistics result

Descriptive analysis of the SMEs of the survey shows that 71.7% of the SMEs are a sole proprietorship form of business, 13.6% are in partnership and 14.6% are limited liability companies. The result also indicates that 25.3% of the SMEs in the survey are in the manufacturing business, 33.7% in distribution wholesale nd retail business), 26.3% are in a service related business, 10% of the SMEs are in agro allied usiness and 4.3% are in other businesses not indicated in the questionnaire. The majority of the responding firms (59.1%) got their initial capital from personal savings. Another 27.1% got support from family and friends, while 6.9% inherited the business and 3% of the responding SMEs acquired a bank loan to start a business. Furthermore the analysis shows that the age of the SMEs in the survey is between 2 and 55 years, their average age is approximately 13years. On the size of the SMEs the analysis shows that the average total asset of the SMEs in the survey is ₦ 17,163071.80. With respect to the volume of sales, profit and the number of employees of the SMEs in the survey, The result shows that the average sales of the responding SMEs are ₦26,022,695.25, the average profit is ₦3,570,434.57 and the average number of employees of the responding firms is approximately 15.

Regression result and test of hypothesis

Two regression results will be presented in testing the relationship between credit and SMEs performance

The performance of SMEs using return on asset (ROA)

The result of the regression is as follows:

International Journal of Small Business and Entrepreneurship Research
Vol.3, No.4, pp.22-31, July 2015
Published by European Centre for Research Training and Development UK (www.eajournals.org)

Table 1: Regression results on the impact of credit on the performance of SMEs (using a return on asset)

Dependent variable: ROA					
Variable		Coefficient	Std. Error	T	Sig.
1	(Constant)		.078	4.340	.000
	VOLOAN	.252	.000	1.540	.133
$R^2 = 0.37$					
F = 2.37					

*Significant at 5% *** *Source: SPSS Output*

The result in table 1 shows that the $R^2 = 0.37$ and the F=2.37 meaning that the model account for 37% of the variation in the return on asset of the SMEs. In other words, 37% of the variation in the return on asset of the SMEs is responsible for the volume of credit collected by the SMEs. The result shows that there is no significant positive relationship between SMEs performance proxies by SMEs return on asset and volume of SMEs credit. We therefore accept the null hypothesis one. In other words, credit is not be a determinant of the profitability of SME. This may be due to high interest rate in Nigeria which small enterprises may not withstand

The performance of SMEs using the average number of employees

The result of the regression is as follows:

Table 2: Regression result on impact of credit on the performance of SMEs (using number of employees)

Dependent variable: NOE					
	Variable	Coefficient	Std. Error	T	Sig.
1	(Constant)		.000	5.986	.000
	VOLOAN	.445	.000	2.430	.000***
$R^2 = 0.18$					
F = 8.06					

Source: SPSS Output

The result in table 2 above shows that $R^2 = 0.18$. it shows That 18% of the total variation in the employment of SMEs is responsible for the formal credit collected by SMEs the B=0.45 and the F value is 8.06. The result shows that the volume of SMEs credit is significantly and positively related to the performance of SMEs (number of employees) at 1% significant. We therefore reject the null hypothesis two and accept the alternative hypothesis. That is to say there is significant positive relationship between the volume of SMEs credit and the number of employees of SMEs.

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

The result further indicates that a unit change in the volume of SMEs credit increase SMEs to employment by 0.45. This confirms theoretically our *aprior* expectation that increase in credit will lead to an increase in quality and quantity of factors of production (Land, Capital, Labour and Machinery). This will in turn lead to high production. This implies that credit will lead to more employment of labour. Credit is therefore a major determinant of employment generation on SMEs

DISCUSSION

Performance is measured in this research to mean any growth in profit, and the number of employed by the SMEs. Profit measures how well the organizational goals are achieved and the number of employee measure whether the government as an external stakeholder has achieved its aim of supporting SMEs financially. That is to whether SMEs employ millions of unemployed Nigerians.

The research found a significantly positive relationship between performance of SMEs (in term of its ability to provide employment) and SMEs volume of formal credit that has confirmed the life cycle of the model and the pecking theory which says that increase in SMEs access to credit will lead to the increase in the quality and quantity of factors of production which will also lead to increase in the production and increase the performance of SMEs. It is also in line with research by Olutunla and Obamuyi (2008) that found a significant relationship between access to credit and profitability of SMEs. The research is also in line with the findings in Hunton *et al* (2003) that found the ROA and ROS of the firms that adopted ERP increases more than the non adopters of ERP.

CONCLUSIONS AND RECOMMENDATIONS

From the findings above we can conclude that credit is a major determinant of SMEs ability to generate employment is Sokoto metropolis of Sokoto State of Nigeria. The research therefore recommends that government should make policies that will compel commercial banks and other financial institutions to increase access to credit for SMEs and reduce interest rate on credit to SMEs. This will help greatly in creating employment opportunities for the millions of unemployed Nigerians. The Federal Government of Nigeria should increase its support financially and otherwise to all government programs and institutions that provide credit to SMEs.

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ISSN 2053-5821(Print), ISSN 2053-583X(Online)