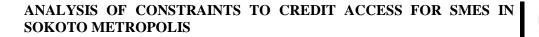
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ABSTRACT

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Keywords Access to credit Constraints to access to credit Small scale enterprises Finance Collateral SMEs.

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This paper investigates the constraints to access to credit by SMEs in Sokoto metropolis, the capital city of Sokoto State of Nigeria. The research uses primary data collected from 294 respondents out of a population of 1710 registered SMEs in Sokoto metropolis using availability sampling technique. Regression analysis was used to analyses the data. The result revealed that there is no significant relationship between the volume of SMEs formal credit and the age of SMEs, size of SMEs, ownership structure of SMEs, size of SMEs collateral, level of education of the entrepreneur and number of training attended by the entrepreneur. However the result shows a significant relationship between volume of SMEs credit and interest rate meaning that only interest rate constrained access to credit in the study area. The study therefore, recommend lower interest rate in the future government intervention programs for SMEs in Nigeria

Contribution/ Originality: This study contributes in the existing literature on development Economics and SMEs financing. This study uses new estimation methodology in Multifple Regression Analysis. This study is one of very few studies which have investigated Constrain to credit access by SMEs in Nigeria. The paper contributes the first logical analysis on factors that constrain SMEs from accessing credit. The paper's primary contribution is finding that interest rate constrain access to credit for SMEs in Sokoto metropolis.

1. INTRODUCTION

Growing body of literature has shown that Small and Medium Scale Enterprises (SMEs) are one of the catalysts to growth and development by dominating the private sector landscape and form the bulk of business activities in most developing countries. SMEs are one of the major sources of economic growth, job creation, innovation and other key economic indicators. SMEs provide an effective means for mitigating rural-urban migration and resource utilization.



The importance of small and medium scale enterprises can be seen in developed and developing countries. Small and Medium Enterprises represent 99 % of all enterprises in the European Union and provide around 65 million jobs and are essential domain of entrepreneurial spirit and innovate (Jihila, 2004). Similarly, in United Kingdom, Small and Medium Enterprises are estimated to employ 65 % of the private workforce accounting for 7.3 percent of turnover and represents 57 percent of Gross Domestic Product (Sharp and Cooper, 2005). It is now widely accepted that SMEs are extremely important to western economies accounting for an average employment of 66% and 64 % in European Union and the United States of America respectively (Kermel and Byron, 2002).

The quest for economic development to ensure overall improvement in individual well being of citizen has been the pre-occupation of every nation. Nigeria as a developing nation, Small and Medium Enterprises have played an important role in the development of the economy even though the Nigerian SMEs have remained under developed arising from so many constraints. One of these constraints is poor access to credit which leads to weak capital base and a short term approach to business which means Nigerian SMEs are often unable to develop sustainable competitive advantages (Capenter, 2001).

Traditionally, commercial banks lend to large enterprises which are adjudged to be creditworthy. They avoid business with the poor and their small businesses because the associated cost and risk are considered relatively high. Informal Credit institutions therefore became the main sources of funding the SMEs in Nigeria. Consequently, the SMEs continue to face the challenge of inadequate funding which weaken their capital base, productivity and size. This credit condition of the SMEs led the government of Nigeria to establish many credit schemes with the major objective of supplementing the efforts of the private sector in providing credit to SMEs. But SMEs are still unable to access sufficient credit for them to develop to the expectation. The question is why SMEs are constrained from accessing credit. There are little or no research in to why SMEs in Sokoto State are not accessing credit from formal financial institutions and programs. Therefore the objective of this paper is to investigate empirically factors that constrain access to credit for SMEs in Sokoto metropolis. The study was conducted in Sokoto Metropolis the capital city of Sokoto State of Nigeria. The choice of Sokoto State is based on the fact that it is considered the least private sector friendly in Nigeria according to a UNDP report in 2008. Similarly, in February 2012 the report of the National Bureau of Statistics place Sokoto State the poorest State in Nigeria with about 81% of its population below the poverty line. Research of this nature is hoped to help policy makers in Sokoto State to make policies that will address this problem. Accessing credit to establish new businesses or expanding the existing ones is expected to improve economic condition of the people of Sokoto State. The paper has six sections. Section one is this introduction, sections two is the review of the literature, section three deals with theoretical framework and research hypotheses, section four is the methodology of the study, section five gives the result of the study and section six provide the policy implication and conclusions.

2. LITERATURE REVIEW

The review revolves around the concept of Small and Medium Enterprise, factors constraining access to credit and theoretical framework.

2.1. Concept of Small and Medium Enterprise

There are so many definitions of SMEs. But for the purpose of this paper the definition by Small and Medium Industry Equity Investment Scheme (SMIEIS) will be adopted that is to say SMEs are those enterprises with a maximum asset of N200,000,000.00 excluding land and working capital with the number of employees not less than 10 and not more than 300.

2.2. Constraints to Access to Credit

There are reasons why SMEs are constraints in accessing sufficient credit. Pandula (2011) classify these reasons into three categories: the firm's characteristics, the financial characteristics and the entrepreneur characteristics. The firm characteristics that affect SMEs ability to access bank credit include firm size, firm age, and firm's ownership structure. A financial institution characteristic is the interest rate. The entrepreneur characteristic that impede SMEs access to credit include; entrepreneur's level of education, entrepreneur experience and training and entrepreneur's network and association.

2.2.1. Size of the Firm

Size of the firm is one of the important factors that determine SMEs access to credit. Many studies indicate that Small and Medium Enterprises are likely to be more financially constrained than the large firms in accessing credit. For example, Binks and Ennew (1996) mentioned several reasons for smaller firms to have constrained to access credit. Firstly smaller firms are faced with information opacity such as inability to provide financial information. Small firms are most of the time owned and manage by the entrepreneur himself and there is no much legal requirement to regularly report financial information. Another reason is that smaller firms have fewer assets to offer as collateral and smaller firms failure rate compared to large firms is very high.

2.2.2. Age of the Enterprise

Age of the enterprise is another very important determinant of access to credit considered by banks. Berger and Udell (1995) found that smaller and younger firms are more likely to face high cost of financing and they are required to offer collateral. Older firms are provided with bank loan 3 times more than younger SMEs in Ghana. Being in the business for many years suggest that at least the firms are competitive on average. Information that is required by banks to evaluate and process loan application may be more available with older firms than the new firms. New firms are not likely to meet the collateral requirement of the credit institutions since they have not cumulated sufficient asset (Pandula, 2011). Insufficient collateral combine with absence of information on financial record may make it difficult for new firms to access credit. In a study in Ghana, Aryeetey *et al.* (1994) found that only 10% of small firms could obtain bank loan but older firm are provided with credit three times more than their smaller and younger counterpart.

2.2.3. Size of Collateral

The importance of size of SMEs collateral to the banks in granting loan cannot be over emphasized. Storey (1994) stated that bank financing of SMEs will depend on whether the lending can be secured by collateral. He also stated that firm with least intangible asset need to borrow less, compared with firms with more tangible asset because of collateral factor. Collateral has been proxies by land and machineries. SMEs have fewer assets to offer as collateral than large firms. This may largely relate to the stage of growth the firms belong to. In the earlier stage of the firm, it may have lower retained profit which may hinder them from purchasing fixed asset compared to larger firms which have a longer history (Pandula, 2011). In another research in Ghana, Ofei (2004) found that generally bank savings and landed property are the most important collateral accepted by credit institutions. The research also found out that 62% of the respondent felt fully constrained in assessing fund due to their inability to provide sufficient collateral and high interest rate charge by lending institutions.

Booth and Chua (1995) studied a sample of 1,347 high-amount loans in the United States with an average value of US\$ 184 million, and found that 45% of them were guaranteed in place of collateral. But another research in the same US by Berger and Udell (1995) shows that 70% of a large sample of loans, smaller than US\$ 50,000 was covered with collateral .Similarly. Result from the work of Obamuyi (2009) revealed that the major reasons attributable to the SMEs that have made accessibility to credit difficult to them include poor credit worthiness (41.7

per cent), lack of collateral security (33.3 per cent), poor project package (33.3 per cent), and lack of adequate record (25.0 per cent) and high risk (25.0 per cent).

2.2.4. Ownership Structure of Enterprise

Another important factor that pose constrain to access to credit for SMEs is the legal Status of the SMEs. The banks as reported by many researches give preference to those SMEs that are legally recognized by the relevant authorities. SMEs that are incorporated are more likely to be less constrained to access to credit than those that are not. For example Mcmillan (1993) found that listed firms and foreign owned firms face lesser financial constraints. Also Storey (1994) found that legal status influence the bank lending. He further states that corporate status at start up appears to be associated with a greater likelihood of bank lending.

2.2.5. Level of Education of Entrepreneur

Education of the entrepreneur is an important determinant of access to credit by banks. Available researches found significant positive relationship between level of education of the entrepreneur and access to credit for the SME he manages. The higher the level of education of the entrepreneur the high his ability to be aware of the existing credit institutions and programs, the higher the amount of loan he can access for the enterprise he manages. Lack of awareness, poor accounting record and lack of good governance are highlighted as some of the major problems faced by SMIEIS implementation (CBN, 2005). Salami (2004) identifies ignorance and lack of requisite knowledge as some of the challenges facing the SMIEIS scheme. A survey by Richardo and Francisco (2003) indicate that less than 10% of poor households in Latin America have access to credit. However their findings show that there is positive correlation between access to credit on one hand and income and house hold education on the other hand.

2.2.6. Entrepreneur's Managerial Training

Lack of familiarization with loan process is another constrain to access to credit for SMEs. Entrepreneurs need to get training on the loan procedure and other modalities. Isacc and Abimbola (2005) identify low level of management and technical competence as a problem of SMEs access to SMIEIS fund. Similarly Dogondaji (2006) reported that lack of familiarization with government and bank loan are some of the problems that threaten the growth of SMEs. SMEs continue to lack access to credit. The major reason is the inability of the SMEs to provide relevant information that will help banks assess the worth of the enterprise and determine the risk involve in giving credit (Santiago, 2005).

2.2.7. Interest Rate

Many studies reported interest rate as a major factor that deter the flow of credit from banks and other financial institutions to SMEs. In a research conducted by Dogondaji (2006) Many SMEs express strong feeling on the problems that they take as critical and prevent them from accessing credit. These problems are: interest rate, inadequate technical capacity to develop sound feasibility studies, short repayment period and lack of collateral security. Similar research by Mensah (2004) reported that SMEs sector are short of both debt and equity financing because of high interest rate charged by financial institutions. Similarly Binks and Ennew (1996) mention interest rate as one of the major problems rated as important that prevent SMEs from accessing credit.

The recently completed World Bank, Nigeria SME Finance report (2012) revealed that the main reasons for SMEs not applying for loans through the formal channels: interest rates not being favorable (18%), the collateral requirements being too high (18%) and the application procedures being a deterrent (34%). Other explanations are size of the loan and maturity insufficient (1%) and 6% of the respondents didn't think the loan will be approved even if they apply. For the firms that did apply for loans, on average 60% of them were rejected, a figure which has declined, from 69% in 2007. The main reasons cited by financial institutions for not qualifying for a loan are;

insufficient collateral (42%), incompleteness of loan application (13%), problems with credit history (10%). And other reasons (29%)

2.3. Theoretical Framework

There are many theories that explain SMEs financing; the Bank Capital Channel Model views a change in interest rate as it affect lending through bank's capital. The signaling argument states that good firms should provide more collateral so that they can signal to the banks that they are less risky. The packing-order theory states that firms prioritize the source of financing from internal (cash flow and entrepreneurs own capital) and external sources according to relative availability and opportunity cost. For most firms the internal funds are always not available or even if it is available it is insufficient to undertake the required level of transaction for profitable projects. This calls for the external finance to fill the financial gap (Olutunla and Obamunyi, 2008). The theories above will guide this research work.

3. METHODOLOGY

The population of registered SMEs in Sokoto State stands at 1710 as at December, 2009 according to Sokoto State Ministry of Commerce and Industry. Out of which a sample of 294 SMEs were selected using availability sampling. The use of the technique was necessitated as some of the registered companies were no more operating. The one that exist might not have kept records. Therefore, only those that operate and have records were sampled. These SMEs met the definition by Small and Medium Industry Equity Investment Scheme and most operate for 2 or more years. The data was collected for 5 years period of 2007 to 2011.

A structured questionnaire was developed for data collection. Questions were asked on the amount of loan collected, the interest rate on the loan, age of the SMEs value of Landed asset, value of total asset, ownership structure of the firm, level of education of the entrepreneur and number of training attended by the entrepreneur.

The study employs multiple regression analysis to test the relationship between volume of SMEs credit and the range of factors that constrain SMEs access to credit that includes age, size (proxies by total assets), size of collateral (proxies by value of landed asset), ownership structure, entrepreneurs level of awareness (proxies by level of education of the entrepreneur) and familiarization represented by the number of training attended by the entrepreneur and the interest rate. The hypotheses to be tested are as follows:

- 1. There is no significant positive relationship between age, size, size of collateral, ownership structure and the volume of formal credit.
- 2. There is no significant positive relationship between entrepreneur's familiarization with formal credit institutions/programs modalities and the volume of SMEs formal credit.
- 3. There is no significant positive between the interest rate and the volume of SMEs formal credit

3.1. Model Specification

To test the constraints to access to credit the following model was estimated

$$\mathbf{Y} = \alpha + \beta_1 \mathbf{x}_1 + \beta_2 \mathbf{x}_2 + \beta_3 \mathbf{x}_3 + \beta_4 \mathbf{x}_4 + \beta_5 \mathbf{x}_5 + \beta_6 \mathbf{x}_6 + \beta_7 \mathbf{x}_7 + \mathbf{e}$$

Where

- Y = the volume of SMEs formal credit.
- α + autonomous constant term
- β_1 to β_7 = Parameter of the model

 $x_1 =$ age of the enterprise

 $x_2 =$ size of enterprise

 $x_3 =$ size of the collateral

 $x_4 =$ Ownership structure

- $x_5 =$ level of education of entrepreneur
- $x_6 =$ Number of training attended by entrepreneur
- $x_7 =$ interest rate
- e= error term

Adapted from Olutunla and Obamunyi (2008)

4. RESULTS AND DISCUSSION

Table 1 shows the result of the study.

Dependent variable: Volume of loan				
Variables	Coefficient	Std. Error	Т	Sig.
(Constant)		9427742.794	2.063	.069
Age of Enterprise	.049	228737.248	.282	.784
Total Asset	.516	.121	1.044	.324
Landed Asset	.173	.126	.424	.682
Ownership Structure	.078	1568058.690	.407	.693
Education	.073	903990.457	.377	.715
No of Training	.086	1246140.690	.338	.743
Interest Rate	384	415571.742	-2.463	.036**
$R^2 = 0.81$				
F = 5.61 * *				

Table-1. Regression Result on constrain of access to credit

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

From the result, the R^2 = 0.81 the F= 5.61 meaning that 81% of the variation in the volume of SMEs credit is accounted for by age of SMEs (β =0.05), total asset of the SMEs as a proxy for the size of the SMEs (β =0.52), value of the landed asset of SMEs as a proxy for collateral (β =0.17), ownership structure of SMEs (β =0.08), level of education of the entrepreneur as a proxy for awareness (β =0.07), number of training attended by the entrepreneur as a proxy for familiarization (β =0.9) and the interest rate (β =-0.38).

The coefficient of age of the firm was positive but statistically not significant. This is contrary to the *apriori* expectation that the older the firm the more likely it is for financial institution to grant loan. Similarly, The coefficient of size of the firm carries a positive sign but statistically not significant. This is contrary to our earlier expectation and to the finding in Binks and Ennew (1996) that stated that smaller firms are constrained from accessing credit. Similarly Berger and Udell (1995) reveal that smaller and younger firms are more likely to face high cost of borrowing.

The result for the ownership structure indicates a positive relationship but also statistically not significant, the coefficient is 0.078. It shows that legal status of the firm is not an important factor that constrains SMEs access to credit. This is contrary to the findings in Mcmillan (1993) that found that listed SMEs face less financial constraint, Storey (1994) that reported that legal status influence the bank leading.

The coefficient of size of SMEs collateral measured by the SMEs value of landed asset is statistically not significant and contrary to our expectation. This is also contrary to the findings in Obamuyi (2009) which revealed that one of the reasons attributed to SMEs poor access to credit is lack of collateral.

Looking at the two variables that expressed entrepreneur's characteristics in relation to access to credit, the result shows that the coefficient of awareness measured by the level of education of the entrepreneur has positive sign but statistically not significant contrary to the *apriori* expectation that the higher the level of education of the entrepreneur the more likely it is for him to be aware of the existing credit institution/programs and the modalities, the more the amount of the loan he can get from financial institution. This is also contrary to the reports of the CBN

(2005) that mention lack of awareness as one of the major problems faced by SMIEIS program. Similarly, Salami (2004) reported ignorance and lack of requisite knowledge as some of the problems that impede SMIEIS program.

The coefficient of familiarization measured by the number of training attended by the entrepreneur is also not significant.

Looking at the result of the last variable that deals with the characteristics of the financial institution, that is, the effect of interest rate charged by the financial institutions, the coefficient of interest rate carried a negative sign and is statistically significant at 5% in line with the *apriori* expectation and also in line with the economic theory that interest rate is always inversely related to investment. The reason for this may be the fact that the area of the study is predominantly Muslims and Islam prohibit interest rate as it is in the conventional credit system This findings is also in line with research by Mensah (2004) who reported that SMEs sector are short of both debt and equity financing because of high interest rate charged by financial institutions. Similarly, Binks and Ennew (1996) also mention interest rate as one of the major problems rated as important that prevented SMEs from accessing credit.

From the above it is clear that there is no significant relationship between volume of credit and other independent variables except interest rate. Therefore our hypothesis number 1, and 2 are accepted and 3 is rejected.

5. CONCLUSIONS AND RECOMMENDATION

From the result above we may conclude that age of the enterprenuer, size of the enterprise, size of collateral, ownership structure of the enterprises and level of education of the enterprenuer does not constrain access to credit in Sokoto for SMEs in Metropolis. And that that only interest rate constrain access to credit for SMEs in Sokoto metropolis. There may be other reasons that may constrain SMEs access to credit which are not investigated in this research. We therefore call on a further research on this subject so that other reasons may be identify. The research therefore recommends lower interest rate for all credit to SMEs. In alternative the policy makers may include Islamic mode of finance in any future credit scheme for SMEs. That will greatly solve the problem of interest rate and give way for SMEs to access credit to their need.

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