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Financing Small and Medium-Scale Enterprises for Sustainable Growth and Development in Nigeria: A Case Study of Zaria, Kaduna State

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Abstract
Economic growth and development can not be achieved without putting in place well – focused programmes to create employment opportunities, generation of income and reduction in poverty. This can be achieved through provision of credit facilities to small and medium-scale enterprises. This study therefore, has attempted an investigation into the role of financial institutions in financing Small and Medium – Scale enterprises in Zaria Local Government Area of Kaduna State. Using multivariate Logit regressions to analyze a sample of cross sectional data across 40 enterprises, and testing the hypothesis using the log-likelihood statistics, the study reject the null hypothesis that the total amount generated by financial institutions and disbursed to SMEs is not positively correlated with the development of the SMEs sub-sector. The study reveals that boardroom politics, loan repayment records, competition, interest rates value of fixed assets and bureaucratic procedures are some of important factors that determine the ability of prospective entrepreneurs in obtaining loans from financial institutions. It concludes with the recommendations that establishment of functional micro insurance schemes, granting loans to well established firms, removal of all structural and institutional bottlenecks and adoption of the ability to pay criteria in the disbursement of loans are necessary conditions to ensure vibrant SMEs in the country.
Keywords: Financial Institutions, Credit Facilities, Small and Medium Scale Enterprise Sustainable Growth and Development, Entrepreneurs.

1. Introduction

World wide, the small and medium scale enterprises (SMEs) have been accepted as the engine of economic growth for promoting equitable development. The relative importance of SMEs in both the advanced, emerging and developing countries has led to the reconsideration of its role in the economy of nations. As a nursery of entrepreneurship which is often driven by individual creativity and innovation, the emergence of SMEs serve as a pointer to the development of many countries measured by such indices as the level of industrialization, modernization, urbanization gainful employment and equitable distribution of income and improvement in the quality of life for all citizens. (Ayanda and Adeyemi, 2011).

Historically the emergence of SMEs in Nigeria can be traced to 1946 when the essential paper No. 24 on "a ten year plan of development and welfare of Nigeria, 1946" was presented by the colonial government. Prior to 1946 and before the arrival of British colonialists, there existed numerous small-scale industries and handcraft enterprises based on the available raw materials to meet local and regional demand. While the Hausa, Yoruba, and Benin people developed significant small scale manufacture of goods for a variety of trade, social and religions purpose; the West African manufacturing sector was based on clothing, metal works, ceramics, construction and food processing. In the Kano region, textile and leather goods were produced while Iron was smelted at the Nok region in the (then) Benue-Platue (now Jaba Local Government Area of Kaduna State, Nigeria). These traditional manufactures survived well into the colonial era, which understandably failed to provide sustainable basis for industrial change or investment (Synge, 1993).

After the independence in 1960, successive government in Nigeria attempt to give recognition to the role of SMEs as catalyst to national development. `The first attempt in this endeavor was the launch of the First National Development Plan (1962 - 1968) which, in addition to its core objectives, sought to correct all past deficiencies in the nation's industrial sector programmes. With the indigenization Decree of 1971 which transferred the commanding height of the Nation's economic activities to the hands of Nigerian entrepreneurs, SMEs development were encouraged to develop and promote growth and economic diversification as a means of reducing the dependence of the economy on agricultural sector as a principal earner of foreign exchange. Subsequent development plans initiated the establishment SMEs as a viable engine of growth and development (Egbon, 2004). Definitely, Nigeria's vision of being counted among first twenty economics in the world by 2020 cannot be attained without putting in place a strong credit facility for financing small and medium scale enterprises. Therefore, the objective this paper is to review the contributions of financial institutions in financing SMEs for sustainable growth and development in Nigeria.

1.2 Research Hypothesis

Ho; the total amount of loan disbursed to SMEs by financial institution has not significant impact on the performance of SMEs in Nigeria.

HA; the total amount of loan disbursed to SMEs by financial institution has significant impact on the performance of SMEs in Nigeria.

1.3 Scope of the study

Financing small and medium scale enterprises for sustainable growth and development in Nigeria was the jurisdiction of this study with a main focus on Zaria and its environs, in Kaduna state.

To achieve the objective of this study, the paper is divided into five sections; apart from this introduction, section 2 deals with literature review and theoretical framework. Section 3 explores data and methodology adopted. Section 4 deals with the result and discussions. Finally, section 5 concerns with conclusion and recommendations.

2. Literature Review and Theoretical Framework

2.1 Some Conceptual Notes

The concept of small and medium-scale enterprises (also known as small and medium-scale businesses) have been variously defined by different Authors and scholars. Whereas small and medium-scale enterprises (SMEs) are commonly used by the European Union member states and some international organizations such as the world Bank, the United Nations and the world trade organization; the small and medium-scale businesses (SMBs) is predominantly used in the United States of America. Regardless of the dichotomy inherent in the classification, both SMEs and SMBs conceptually convey the same meaning (Wikipedia, 2011).

A small and medium scale enterprise (SMEs) as is commonly used in Nigeria is one concept that mean different thing to different scholars. Since no universal definition appears to be necessary in the conceptualization of SMEs, the definitions in use depend on the purposes that those definitions are required to serve and the policies which governs the SMEs sub-sector of the economy. However, there are three principal parameters which are generally applied by most countries, either singly or in combination. These are: capital investment on plant and machinery; Number of workers employed; and volume of production or turnover of businesses (Egbon, 2004).

Despite the fact that there are no universally quantitative norm in conceptualizing SMEs in many countries, the factors that set them apart are essentially quantitative or comparative. According to Ayanda and Adeyemi (2011), on the quantitative side are internal management structures, decision-making process, financial practice, trading styles, attendance risk factors amongst others. While on the comparative side are factors that have to do with the way SMEs are situated vis-à-vis large enterprises in the corporate sector.

On issues that relates to their qualitative definitions, it has been observed that most SMEs are one person shows, or are run by two or more individuals, usually relatives, friends or business partners, who take most of the decisions. Under this classification, there exist, no serious distinction between private and business assets, while subjective and personal factors play a large role in decision making. The personal stakes of SMEs entrepreneur have in the management of their business are much higher than those of the corporate executives in their business.

On the other hand, issues relating to cooperative factors have to do with their relative size in comparison with the large corporate entities with which they share a given economic space. Comparatively, while SMEs in one country may be small, they may well be larger than “big” companies in other countries. Not withstanding their absolute size, the most interesting thing is that the problems confronting SMEs appears to be similar in most countries while the level of obstacles may vary from country to country, industry to industry depending the firm’s characteristics.

The budget of the Federal Government of Nigeria (1990) defined small-scale enterprises as that enterprise with annual turnover not exceeding ₦500, 000 (for those of commercial loans) and enterprises with capital investment not exceeding N5million (for the purpose of those seeking merchant loans). This definition is used as a benchmark or a foundation to all other definitions that are adopted here because it gives insight into the conception and the funding arrangement to enterprises that seeks to commence business operation. In section 351 of the Company and Allied Matters Act (CAMA) (1990), a company qualifies as a small company in a year if for that year, the following conditions are satisfied; it is a private company earning a share capital; the amount of its turn over for the year is not more than N2million or such amount as may be fixed by the commission (i.e. CAMA); none of its members is an alien; none of its members is a member of a government corporation or agency or its nominee; and, the Directors between them hold not less than 51% of its equity share capital. Still within the Nigerian context the NESG (2002) agues that the best way to capture the definition of SMEs is based on the nature of business and its magnitude. For instance, wayside artisans, petty traders, pure/bottled water producers, bakers, local fabricators (regarded as micro enterprises) should constitute part of SMEs.

The European Union member states traditionally have their own definition to what should constitute SMEs. For instance, the traditional definition of SMEs in Germany had a limit of 250 employees, while Beligium have a limit of 100 employees. At the moment, the EU has started to standardize the concept of SMEs. Its current definition categorizes companies with fewer than 10 employees as "micro" those with fewer than 50 employees as "small" and those with fewer than 250 employees as "medium". Contrarily, in the United states, when small businesses are defined by the number of employees, it is often referred to those with fewer than 100 employees, while medium-sized business often refers to those with fewer than 500 employees. In Canada, SMEs, are defined as one that has fewer than 100 employees (if the business is a goods-producing business) or fewer than 50 employees (if the business is a service- based business), and a medium-sized business as fewer than 500 employees. In New Zealand, SME is one that has 19 employees or fewer (Wikipedia, 2011).

So far, emphases have been placed on conceptualizing SMEs based on the number of employees. In terms of volume of sales, SMEs in Britain is defined as that industry with annual turnover of two million pounds or less than 200 paid employees. Ozigbo (2000) gave that of Japan in accordance with the type of industry. For instance, in the manufacturing sector, SMEs are defined as those with 100 million paid-up capitals (in Japanese Yen) and 300 employees; while those in wholesale trade have Y30 Million paid-up capital and 100 employees. In Nigeria, the definition of SMEs varies from time to time and across institutions. According to Onuoha (1980) the Federal Ministry of Industries (1971) defined SMEs to be "any manufacturing, processing or service industry with capital investment not exceeding N150, 000 in machinery and equipment alone. The National Industrial Policy (1989) defined SMEs as those whose investment total between ₦2million and ₦5million, excluding land but including working capital. While Adekunle (2003) quoting from NERFUND defined SMEs as those whose total assets excluding land and industry cost of investment project, do not exceed ₦10 million.

Under the Central Bank of Nigeria (2006) monetary and credit policy guideline, SMEs is defined as an enterprise with fixed asset, excluding land, but including working capital, not exceeding ₦10 million. While the Bank of industry's credit policy guideline defined SMEs as an enterprise with project whose total cost does not exceed ₦200 million. This definition was later streamlined by the National council on industry as reported by Ukeje (2003) in order to ensure uniformity and provide for it's renew every four years. The definition adopted here used a combination of capital investment and employment for categorization of industry. The definitions were first raised in 1996 and then 2001 as follows: the micro/cottage industry are those with a labor size of not more than 10 workers or total cost (including working capital but excluding cost of land) and not more than 1.5million; small-scale industry are enterprises with a labour size of between 11 to 100 workers or a total cost (including working capital but excluding cost of land) and not more than ₦50million; while medium-scale industry are those enterprise with a labour size of over 300 worker or a total cost (including working capital but excluding cost of land) of over ₦50.0million but not more than ₦200.0million.

Regardless of lack of uniformity in these conceptualizations, Oshagbemi (1983) opined that SMEs share the common idea of being generally low in terms of number of persons employed and in the amount of investment and annual business turn over.

2.2 Theoretical Literature

The theoretical underpinning in the development of the SMEs derives from the traditional theory of the firm. At the early stages of industrialization, most economies were characterized by traditional industries and large number of small firms who as of that time draw their strength not from the abundant supply of capital, but from their vast supply of labour. For instance, in Nigeria, before the arrival of the colonial masters, traditional economic activities were predominantly agricultural production and the marketing of imported goods alongside the production of some handicraft items such as clothing metal work, ceramics, construction and food processing, leather works and melting of Iron amongst others, based on the available raw materials and labour. As noted by Synge (1993), these traditional manufacture survived well into the colonial period, which understandably failed to provide sustainable basis for industrial change or investment. Equivalently, Mask (2010) repeated the case for Japan during the interwar years (1919-1938) to be characterized by traditional industries co-existing with large number of small firms with its government policies giving due priority to small and medium scale enterprises.

The over all philosophy in the development of SMEs as reported by Awosika (1997), Gunu (2004) and Aremu (2004) was that SMEs generates employment, provides income, savings amongst others which make them stand out as veritable engines for the development of entrepreneurial capabilities and indigenous technology for the growth of the economy. These, they do by contributing substantially towards the gross domestic product (GDP), increase in export earnings and the development opportunities that are capable of meeting the overall national objectives.

However, judging from the poor base of industrialization in the country, successive government in Nigeria have always developed one programme or the other to boost SMEs. As a way of meeting the ever increasing demand for foreign manufactured goods, government adopted the import substitution industrialization

to promote growth and economic diversification as a means of reducing the dependence of the economy on agricultural and foreign sectors. As Ekpenyong (1992) emphasized, "While it must be recognized that government policy encourages public participation and ownership of heavy industries through protection and subsides, no particular attention was paid during the pre-structural adjustment programme (Pre-SAP) era to the huge sector of small-scale manufacturing which employed 875,000 persons in 1987 as against modern manufacturing subsector that employed 48,000 persons in 1985. Yet it is expected that SMEs should be capable of mitigating the various adverse effects against industrial growth, especially in areas of employment generation, mobilization of local resources, regional dispersion and linking up[2] with other domestic sectors of the economy. Both world Bank (2005), and Chizea (2002) blamed the failure of the past industrialization policies favouring SMEs to stimulate economic growth and development to the country's reliance on "big elephant" project which only appeared physically impressive but had no linkage with the rest of the economy. Additionally, most of the industrialization strategies that were adopted were neither resource-based nor were they anchored on technology-base but simply relied on "blind optimism" that the establishment of these industries would eventually lead to the transfer of appropriate technology and its adaptation to suit the Nigerian environment.

2.3 Empirical Literatures

Most of the empirical literatures on the development of SMEs are tied to the contribution of the sector to the growth and development of the economy concerned. In it, areas of emphasis included employment generation, poverty reduction and income generation among other issues. Yet, other studies such as Basil (2005) focus attention on the non-durability of SMEs. The study concludes that about 50% of SMEs surveyed did not receive external finance while 77% indicated lack of access to financial resources-hence, the ability to expand becomes contracted which ultimately resulted in their death.

Yet, in traditional SMEs, interventions such as direct credit programmes and/or technical assistance and the attempt to measure the impact of support or intervention on SMEs and its performance are infrequently done and are plaqued by measurement and methodological problems. While Aremu and Adeyemi (2001) have shown that most SMEs particularly in Nigeria died within their first five years of existence. It was also revealed that smaller percentage goes into extinction between the sixth and tenth year and only about five to ten percent of young companies survive, thrive and grow to maturity. Factors responsible for these premature death included insufficient capital, lack of focus, inadequate market research, over-concentration on one or two markets for finished products, lack of succession plan, inexperience, lack of proper book-keeping, irregular supply of power, infrastructural inadequacies (water, roads etc), lack of proper records or lack of any records at all, inability to separate business and family or personal finances, lack of business strategy, inability to distinguish between revenue and profit, inability to procure the right plant and machinery, inability to engage or employ the right caliber of staff, cut-throat competition among others.

In a cross-country studies conducted by Fadahunsi (1997) SMEs contributed significantly to the economy of various nations. For instance, in Asia, SMEs represent 99.4% of total industries while it generates 93% employment in Indonesia as at 1974. In Japan, SMEs generate 8.4% employment in 1985 while in Korea; it generates 96.6% employment in 1980. In Hongkong, it was 92% in 1981 while in Philippines; it generates 61.2% employment in 1983. For Thailand, it was 72.2% in 1988 while the total value added for both Philippines and Thailand was 47.4% and 30% respectively. This success story for the Asian region was as a result of the emergence of a number of NGOs and voluntary organizations that promoted SMEs particularly in India Bangladesh, Nepal and Philippines.

In a similar study, Cowrie Consultant (1995) Cited in Odetola (1997) covering Northern Nigeria, Western Nigeria, and Eastern Nigeria showed that the sources of business finance from personal savings was 26.6%, 37.04% and 32.14% for the regions respectively. From friends, it was 30.39%, 19.53% and 32.14% respectively. Sources from bank showed 35.29%, 33.33% and 21.42% respectively. From government agencies, it was 8.82%, 7.83% and 3.57% while from trade groups and cooperatives, it was 5.88%, 11.02% and 7.14% respectively.

In the case of Ghana, Okraku and Coffie (1997) reveals that SMEs rely primarily on personal savings of owners, business profits, family members and friends for their financial needs. They have little or no assess to external credit. The effect of this is inadequate fixed capital as well as working capital. The consequences of these are very slow growth rate and frequent failures among small business.

3. Data and Methodology

3.1 Data

The study exploit primary data through a structured questionnaire it utilized responses from both the respondents (beneficiaries of the SMEs schemes) and some selected staff of financial institutions. A sample of 200 applications for funding SMEs received by the bank was reviewed. Out of these 43 were fully approved, 79 were partially approved while the remaining 78 were completely rejected. Data collection was constrained by bank

protocol. A simple random sampling technique was adopted in the selection of the desired respondents. This is to minimize biases inherent in sample selection and ensure that every member of the population has an equal chance of being selected. The study adopts the statistical technique as its method of analysis.

3.2 Specification of the Model

In the set up of the multinomial logit model for this study, an understanding of some basic factors that influence the probability of the SMEs obtaining loan from financial institutions was put into consideration. In this circumstance, it is hypothesized that obtaining loan or not obtaining loan are independent of the choice of whether or not to obtain loan as a dependent variable. While the entrepreneur seeks to maximize the utility of obtaining the loan, the creditor institution tries to minimize the risks associated with giving out loan while holding constant, the utility maximization in the allocation of the total credit portfolio to the potential borrowers. The expected value of the dependent variable is interpreted as the probability that an enterprise with certain characteristics will obtain the loan. Since the bank's decision to credit-ration is characterized by a polychotomous consideration between three mutually exclusive alternatives, the logit model specifies that:

$$P_i = f(\alpha + \beta X_i) = 1 + \frac{1}{e\text{-}(\alpha + \beta X)} \quad \text{--------} \; 1$$

Specification of equation (i) is in line with Pindyck and Rubinfeld (1981).

Where P = Probability of a loan recipient based on certain attributes of the entrepreneur

e = The natural logarithm (-2.718);

X_i = Attributes of the ith enterprise.

According to Pindyck and Rubinfeld (1981) and Kennedy (1992), equations (1) can be transformed into equation (2) to depict the logarithm of the probability that entrepreneurs obtain loan as

$$\text{Log} \; \frac{P_i}{1 - P_i} = \alpha + \beta X \; \ldots\ldots \; 2$$

Let Uij denote the utility derived by creditor institutions in choosing one of the three outcomes and

$$U_{ij} = Y_j X_{ij} + e_{ij} \quad \ldots\ldots 3$$

Where Y_j varies while X_{ij} remains constant across alternative and e_{ij} is a random error term reflecting intrinsically random choice behaviour, measurement or specification error and unobserved attributes of the alternative outcomes.

Also, let P_{ij}(j=0, 1, 2) denote the probability associated with the three choice, with j=0 if the borrower is fully rejected; j=1 if the borrower is partially satisfied; and j=2 if the borrower is fully accommodated by the bank. The multinomial logit model, according to Babcock et al (1995) is given by

$$P_{ij} = \frac{\text{Exp}\,(Y_j X_i)}{1 + \sum_{J=1}^{3} \text{Exp}\,(Y_j X_i)} \quad \text{for } j=1,2,3 \; \ldots \; \ldots\ldots 4$$

In this case, P_{ij} is the probability of being in each of the groups 1 and 2. consequently,

$$P_{io} = \frac{1}{1 + \sum_{J=1}^{3} \text{Exp}\,(Y_j X_i)} \quad \text{for } j = 0 \; \ldots\ldots 5$$

Here, Pi_0 is the probability of being in the reference group or group 0.

According to Maddala (1990), Greene (1993) and Kimhi (1994), when estimating the model in practice, the coefficients of the reference group are normalized to zero. This is because the probabilities for all the choices must sum up to unity (Greene, 1993). Hence, for 3 choices, only (3 – 1) distinct sets of parameters can be identified and estimated. As Greene (1993) noted, taking the natural logarithms of odd ratio of equations (4) and (5) gives the estimating equation as

$$\text{In} \; \frac{[\,P_{ij}\,]}{[\,P_{io}\,]} = Y_j X_i \; \ldots\ldots 6$$

This denotes the relative probability of each of the groups 1 and 2 to the probability of the reference group. The estimated coefficients for each choice reflects the effects of X_i's on the likelihood of the bank's choice of that alternative, relative to the reference group. SPSS Version 20.0 was used to estimate the model. However, following Hill (1983), the coefficients of the reference group may be recovered by using the formula

$$Y_3 = -(Y_1 + Y_2) \quad \text{……..7}$$

For each explanatory variable, the negative of the sum of its parameters for groups 1 and 2 is the parameter for the reference group. In order to identify the marginal effects of the model on the probabilities, Greene (1993) suggest the differentiation of equation (6) by taking its partial derivatives to arrive at

$$= P_j [B_j - \sum PK \beta K]_k \quad \text{……8}$$

When the marginal effects or partial derivatives are obtained, the derivation techniques implicitly indicate that neither the sign nor the marginal effects need bear any relationship to the sign of the coefficients used in obtaining them (Greene, 1993). Using the LIMDEP software, these partial derivatives are converted to quasi elasticities by

$$\eta_{Ji} = X_i (dP_j / dX_i) \quad \text{……9}$$

Where X_i is the mean value of X_i. The quasi elasticity represents the percentage point change in P_j upon a case percent increase in X_i. These elasticities are superior to the coefficients and the partial derivatives by their ease of interpretation.

Consequently, the estimating equation under the null hypothesis becomes:

$$\text{Log loan supply} = \beta_0 + \beta_1 \log \text{Age}_t + \beta_2 \text{logsize}_t + \beta_3 \log \text{Income}_{t-1} + \beta_4 \text{logAsset} + \beta_5 \text{logEducation} + \beta_6 \text{loginternationalization} + \sum_1 \quad \text{……..… ..10}$$

While, under the alternative hypothesis, the estimating equation is given as

$$\text{loan supply} = \alpha_0 + \alpha_1 \text{Age} + \alpha_2 \text{size} + \alpha_3 \text{Income} + \beta_4 \text{TotalAsset} + \beta_5 \text{Education} + \beta_6 \text{internationalization} + \sum_2 \quad \text{……..… ..11}$$

3.3 Model Evaluation

The likelihood ratio index (P^2) is used to test and evaluate the empirical validity of the model. This statistic is related to the likelihood ratio statistic and is analogous to the least squares multiple regression coefficient (R^2). It is bounded between zero and one. According to Greene (1993), the index increases from zero as the fit of the model improves. The likelihood ratio test is given as

$$P^2 = \frac{1 - L(Bu)}{L(Br)} \quad \text{……12}$$

Its test of hypothesis that all the slope coefficients are zero is tested using the likelihood ratio statistic (X^2) which is also referred to as Lambda (λ), it is represented as

$$X^2 = -2 [L(Br) - L(Bu)] \quad \text{……13}$$

This statistic is distributed asymptotically as a chi-square (X^2) with the degree of freedom being the sum of all the estimated parameters of the model. Hence, X^2, df is the control and tabulated value. If the likelihood ratio statistic is greater than the tabulated X^2 value, the null hypothesis is rejected (while accepting the alternative hypothesis) otherwise, the alternative hypothesis is rejected (while accepting the null hypothesis).

4. Results and Discussion

The study was conducted in Zaria and its environs. These areas were selected because of high concentration of rural entrepreneurs and enterprise locations while the SMEs were picked at random to minimize bias.

Questionnaires were administered to the forty-three (43) firms whose applications for funds were approved. Forty (40) of them, representing 93.02 percent duly completed and returned their questionnaires. Consequently, the analysis of this study is based on the 40 enterprises. The questionnaire collected information on the socio-economic characteristics of the enterprises, amount of loan granted, the length of time between the application, approval and "handmark" of the loan, source of loan, type of collateral required and why are some loan rejected. Data was analysed using descriptive statistics and logit regression techniques using SPSS version 20.0 software.

Table 4.1: The Logit Regression Results.

Dependent variables: Loan supply

Independent variables	Logit coefficients	Logit t-values	Logit Std error
Age of Enterprise	0.211	1.610	0.131
Size of Enterprise	0.206	2.245	0.092
Previous income	0.197	1.894	0.104
Total Assets	0.259	3.474	0.075
Education of Entrepreneur	0.080	0.697	0.115
Level of Internationalization	0.123	4.505	0.027
$R^2 = 0.963$; $R^{-2} = 0.961$; F = 405.617; D-w = 0.609; Log likelihood = 2.195366; Chi-square = 1.146476; Number of cases = 40; significant at 5% level.			

Source: Own Computation using SPSS Version 20.0

The result of the logit regression analysis presented in table 4.1 above implies that the main predictors used in this study accounts for about 96 percent of the total variation of the dependent variable (loan supply). However, the magnitude of the predictors indicates that there are other variables that determines the supply of loans which may account for about 4 percent that were not captured in the model.

The results reveal that the age of enterprise (to indicate enterprise's maturity), size of the enterprise (indicating vibrancy) and total assets (indicating ability to pay back, loans acquired) are major factors influencing the desire of an enterprise to be granted loan by creditor institutions as their parameter estimates were reasonably higher compared to previous income, education of the entrepreneur and level of internationalization. One interesting feature of the estimated coefficients is that they are all positively signed and as such, good predictors of loan supply. Total assets acquired by an enterprise has the highest estimated coefficient of about 26 percent (while other variables are held constant). This is slightly followed by the Age of the enterprise, with about 21 percent variation (while other variables are held constant). The enterprise age symbolizes the strength of an organization applying for loan. Equivalently, the study revealed that loan supply will increase by about 21 percent for every one unit change (increase) in the size of the enterprise while holding other variables constant. This is because, as enterprise grow in size (through employment of labour and capital), total output improves, which in turn results in high total revenue and high profits.

On the other hand, the result further shows that education of an enterprise has the least parameter estimates. It reveals that loan supply increases by about 8 percent (while holding other variables constant) for every one unit increase in the level of education. Education is a useful predictor because the entrepreneur in question needs to know about existing rules and regulations governing the loan procurement. Unfortunately, due to semi – literate nature of entrepreneurs in the study area, education became the least of the predictors of the model. Also, loan supply increase by about 20 percent (0.197) for every one unit increase in the level of previous income (while holding other variable constants). This is because the lender institution may want to know whether the applicant has been repayment worthy in the past. Knowledge of the previous income is important because of its high correlation with the ability to pay current loan. The lender always seek this information from network of financial institutions involved in granting loans. The level of internationalization (ability to gain access to foreign markets) is also another important variable influencing loan supply. This is to ensure that the enterprise in question can not only take control of domestic market but can enhance the nation's foreign exchange. Although the age of enterprise, previous income and the entrepreneurs' level of education were not quite so significant in determining loan supply, they collectively formed useful predictors of the model. High networking relationship with other foreign counter parts may help small scale enterprises to export successfully and make them gain competitive advantage over other local enterprises in a dynamic market environment. This is why the other variables such as the size of enterprise, total assets and level of internationalization were statistically significant at 5 percent level. For instance, laws relating to formation of subsidiaries in foreign countries could have changed due to internal political instability and non-economical threat regionally. SMEs needs to acquire sufficient knowledge of international finance and accounting that could influence their level of internationalization to guarantee vibrancy.

4.1 Evaluation of Results

For a guide to an appropriate specification of equation (10), the likelihood ration index (P^2) is used to evaluate the empirical validity of the study. The likelihood ratio test is a statistical technique used to compare the fit of two models, one of which (the null model) is a special case of the other (the alternative model). The test is based on the likelihood ratio, which expresses how many times more likely the data are under one model than the other. The logarithm of this likelihood ratio can be used to compare a p – value, or compared to a critical value to decide whether to reject the null model in favour of the alternative model. The log – likelihood ratio statistic and its probability distribution (assuming that the null model is true) can be approximated using the Wilks[1]

theorem. To test the workability of this theorem, each of the two competing models (the null and the alternative) is separately fitted to the data and the log – likelihood recorded. The test statistic (D) is twice the difference in the log – likelihood and is obtained as:

$$D = 2 \ln \left[\frac{\text{Likelihood for the null model}}{\text{Likelihood for the alternative model}} \right]$$

= - 2 In (likelihood for null model) + 2 In (likelihood for alternative model)

1. Attribute to Samuel Wilks (1938): 'The Large-Sample Distribution of the Likelihood Ratio for Testing Composite Hypothesis

Thus, from the results, the sum of all the estimated coefficients under the null model is 0.359 while the sum of the estimated coefficients under the alternative model is 1.076. Consequently, - 2 In (0.359) is 2.048866 while 2 In (1.076) is 0.14050. Adding these two values gives 2.195366 with degrees of freedom (df) as 5. since the value 2.195366 is distributed as the chi-square according to the likelihood ration test, then, the critical value of X^2 is 1.146476. From observation, the p – value 2.195366 is a great deal greater than the critical value 1.46476. Consequently, the study rejects the null hypothesis that the total amount generated by lender institutions and disbursed to SMEs is not positively related to the development of SMEs sub-sector in Nigeria. That is to say that the financial institutions has positively contributed to the reason why all the slope coefficients of the model are positively signed in response to the loan supplied by the lenders.

4.2 Policy issues of the Finding

The findings of this study have established a number of policy issues. These include:

a. The result is able to establish that loan repayment by SMEs depends on the age, the size and the total assets of the enterprise more than any known determinants.
b. That banks politics, previous loan repayment records, competition, interest rates, collateral requirements and bureaucratic procedures in obtaining loans are some of the critical factors influencing the supply of loans to SMEs.
c. the study also confirm the use of credit rationing mechanism by the lender institutions in terms of rejecting applications, and in terms of loan demand being partially met by the lending institution. That is, lending decision by financial institutions are often group-specific and not general depending on the feasibility of SME project and the ability of such firm to repay loan within the stipulated time possible.

5. Conclusion and Recommendations

This research has explored the role of financial institutions in financing SMEs in Zaria, Kaduna State. The log-likelihood statistic was used to test the hypothesis that the total amount generated by the lenders disbursed to SMEs is not positively related to the development of the SMEs sub-sector of the economy. This hypothesis is in line with the main objective of the study. The study revealed that bank politics, previous loan repayment records, more competition, interest rates, collateral requirement and bureaucratic procedures in obtaining loans were some of the most critical factors that enhances the entrepreneurs' efforts to obtain loan from financial institutions.

Using a pool of panel data from 40 SMEs and runned on OLS basis, the study finds out that all the regressors of the model are positively related to the supply of loans to finance small-scale business operations. In particular, the age of enterprise, size of enterprise and total assets of the enterprises are more critical determinants of loan supply. Education of the entrepreneur is of less significant among all the predictors of the model, while previous income and level of internationalization showed some level of significance in determining how much loan an enterprises can obtain from creditors. Consequently, the results do provides some empirical support for pro-SME policies of directly funding small-scale business for sustainable economic growth and development.

Based on the results of this study, the following recommendations may be appropriate:

a. Putting in place appropriate mechanism to ensure that loans are given to well established enterprises or prospective entrepreneurs that have the capacity and capability to pay back loans borrowed for either business expansion or business establishment. This is to avoid all perceived difficulties in loan repayment.
b. Eliminate all structural and bureaucratic bottlenecks that can impede the smooth flow of loans from the lending institutions to the borrowing firms or individuals. This is to ensure an unobstructed functioning of all economic machines geared towards growth and development.
c. Rather than making lending decision(s) to be group-specific, lending institutions should focus more on the "ability-to-pay" criterion so that no existing or prospective enterprises are short changed in

the granting and disbursement of loans. After all, it is the collective activities of SMEs that constitute economic growth and development.

d. There should be a functional micro insurance outfits for SMEs to minimize the absorption of risks by financial institutions in an event of business failure or liquidation.

REFERENCE

Adebusuyi, B. S. (1997): "Performance Evaluation of Small-Medium scale enterprises (SMEs) in Nigeria". CBN Bullion Vol. 21, No. 4 April / June.

Adekunle, W (2003): "SMEs and Economic Development" Leasing Today. Newsletters Vol. 6 No. 1.

Ayanda, L.B and Adeyemi S. (2011): "An Emperical study of Small Scale financing in Nigeria. Journal of Unilorin Business School. 1 (1).

Aremu, M. A. and adeyemi, S. L (2011): "Small and Medium Scale Enterprises as A Survival Strategy for Employment Generation in Nigeria". Journal of Sustainable Development. Vol. 4 No. 1 February.

Aremu, M. A. (2004): "Small Scale Enterprises: Panecea to Poverty Problem in Nigeria. Journal of Enterprises Development, International Research and Development Institute, Uyo, Akwa Ibom, Nigeria, I(1):1-8.

Awosike, B. O. (1997): "Evolving a National Framework for the emergence of strong and virile Small and Medium Scale Industry Sub-sector in Nigeria. A Seminar paper presented at MAN House. November 5th P.3

Basaut, R (1997): "Technology strategies of Large Enterprises in Indian Industry: Some Explorations" World Development Vol. 25 No. 10 pp 1683 – 1700.

Basil, A. N. O. (2005): "Small and medium Enterprises (SMEs) in Nigeria. Problems and Prospects. Ph.D Thesis. St Clements University.

Burprit, W. J and Rondinelli, D. A. (2000): "Small Firms Innovations for Exporting: To earn and learn? Journal of Small Business Management. Vol 10, 1 – 14.

Central Bank of Nigeria (2006): Annual Report and Statement of Account.

——————— (1996): Monetary and Credit Guideline

Chambers of Commerce, Kaduna state (2003): Gazette

Chizea, E and Adam, A (2002): "Transitional issues in moving from an entrepreneurial to a professionally managed firm. Paper presented at the 16th National Small Firm Policy and Research Conference, Nottingham.

Companies and Allied Matter Act (CAMA) (1990): Gazette. Section 251

Dupe, A (2004): "Bank Funding of SMEs and Actualization of NEEDS. Recipe for economic growth". Guardian July 2.

Egbon,P.C (2004) "industrial policy and manufacturing performance in Nigeria. NCEMA, Ibadan. Pp 1-83.

Ekpenyong, D.B (1995) Financing small enterprising in Nigeria: sources, constraints and prospect. Ibadan Nigeria.

Fadahunsi, O. (1997) The challenges of promoting entrepreneurship and small business" the commonwealth experience (WAMDEVN) PP 170-186.

Faleye, T. A. B (1985): "A Review of Methods of financing Small-Scale Industries in Nigeria. Oyelede Indusstries prints Limited, Ibadan.

Federal Government of Nigeria (1990): "The Budget" of The Federal Republic of Nigeria.

Greene, W. H. (1993): Economic Analysis Macmillan 3rd Ed.

Gunu, U. (2004): Small Scale Enterprises, Sources of finance and importance. Ilorin Journal of Business and Social Sciences (1&2) 36 – 43.

Hallberg, K (2001): "A market-oriented strategy for Small and Medium Scale Enterprise" Ife Discussion paper No. 48.

Hashim, M. K (2006): SMEs in Malaysia: past, present and future. Malaysian Management Review No. 6, 22 – 30.

Hill, M. A (1983): "Female Labour Force participation in Development and Developed Countries. Consideration of the Informal Sector". Review of Economics and Statistics, 63 No. 3 pp 459 – 468.

Kennedy, P (1992): A Guide to Econometrics. Blackwell, Oxford.

Kimbi, A (1994): "Participation of farm owners in Farm and Off-farm work including the option of Full-Time off-farm work". Journal of Agricultural Economics 45(2) Pp 232 – 239.

Lilttle, Ian M. D (1987): "Small Manufacturing Enterprises In Developing Countries" World bank Economic Review 1, 203 – 235.

Maddala, G. S. (1990): Limited Dependent and Qualitative variables in Econometrics. Cambridge University Press, Cambridge.

Mask,C (2001): Financing Small-Scale Business under the new CBN Directives and Its likely Impact on

Industries growth of the Nigeria economy" CBN Bulloion Vol. 25 No. 3. July/September.
Nigeria Economic Summit Group (2002): A survey of micro and small enterprises, NESG Digest, Lagos.
Okpukpara, B (2009): "Strategies for effective loan delivery to Small-Scale Enterprises in rural Nigeria. Journal of Development and Agricultural Economics Vol. 1 (2) Pp 041 – 048.
Okraku, F.D and Croffie, A. (1997) Entrepreneurship and small business; policies and programmes in Ghana. (WAMDEVN) PP 61-81.
Onuoha, B. C and Udensi, C. E (1980): Government and Business Relations. Precious printers and publishers, Enugu.
Oshagbemi, T. A. (1983): Small Business Management in Nigeria. Longman Nigeria Limited, Lagos.
Ozigbo, M. C (2000): Indigeneous Small and Medium Scale Enterprise in Nigeria. African Journal of Business and economic Research Development Africa Consortium, Port Harcourt, Nigeria Vol. 1, No. 4 July.
Pindyck, R. S and Rubinfeld, D. L (1981): Economic Models and Economic Forecast. McGraw Hill New York.
SMEDAN (2006): National Policy on Micro, Small and Medium Enterprises. SMEDAN, UNDP.
Sule, E. J. K (1986): "Small-Scale Industries in Nigeria: Concept, Appraisal of some Government policies and suggested solutions to identified problems" Economic and financial Review. CBN Vol. 24/4 Pp. 24.
Ukeje, E. U (2003): "Employment creation through Small and medium Scale Enterprises, Country experience" CBN Bullion. Vol. 27 No. 4 October/December.
Wilks, S. S. (1938): "The Large – Sample Distribution of the Likelihood Ratio for Testing Composite Hypothesis.
Wikipedia(2011), small and medium enterprises, available on; www.wikipedia.org/wiki/SMEs
World Bank (2010): "World Development Report, Washington DC
Zhixiong, D (2004): Credit Demand of Rural Enterprises and Loan Supply in C. Journal of Rural Development Irina Report on Data processing Results of Two Surveys. Chinese Economy 2004 summer.

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