



DETERMINANTS OF FORMAL CREDIT MARKET PARTICIPATION AMONG SMALL SCALE AGRIBUSINESS ENTERPRISES IN ABIA STATE, NIGERIA

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ABSTRACT

The study analyzed the factors that influence formal credit market participation among agribusiness entrepreneurs in Abia state, Nigeria. Purposive and random sampling techniques were employed in the study. Eighty (80) agribusiness entrepreneurs were selected for the study. Data was obtained from the respondents through a set of questionnaire administered to them. Probit model was employed in analyzing the data obtained. The results showed that educational attainment of the entrepreneurs, family size, size of the enterprise, interest rate, and the demand for collaterals were significant in explaining the factors that influence credit market participation among agribusiness entrepreneurs in the study area. The study recommends that, entrepreneurs should form co-operative societies so as to pull their resources together, rural banking scheme should be established and strengthened with less emphasis on collaterals, reduction of interest rates, among others.

Keywords: Agribusiness; Credit; Entrepreneurs; Market participation; Probit

INTRODUCTION

Provision of credit is one of the components of rural development. This helps in attaining rapid and principal sustainable growth of any economy. Credit can be considered from its ability to energize or motivate other factors of production (Oladeebo and Oladeebo, 2008). Agribusiness represents all business-related activities involved in the production, finance, marketing and distribution of food and fibre. The agribusiness industry is responsible for 50% of the global economy and accounts for 20% of employment in the U.S. and as much as 90% worldwide. Specifically, Agriculture and agribusiness related activities occupy a substantial part of the occupation of majority of Nigerians. More than 70% of all businesses operating in Nigeria are agribusiness concerns, and are primarily in the hands of private sectors (Bartholomew *et.al.*, 2009). Agribusiness enterprises include the whole gamut of operations in the agricultural production and consumption spectrum. These firms are classified as small, medium and large scale agribusiness enterprises (Awoke and Okorji, 2004).

In Nigeria, just like other developing countries of the world, small and medium scale agri-business enterprises remains dominant among others. Agri-SMEs have been observed to play a critical role in economic growth and development of rural areas. It accounts for nearly 2/3 of employment. They are described in (ADOPTASME Project, 2007) as the

'missing middle since they remain underserved and lack access to the tool and finance necessary for rapid expansion when compared with large scale firms. Agribusiness enterprises is characterized by inadequate farm inputs, use of traditional implements, inadequate finance, poor access to financial services, illiteracy among operators, low productivity among others. It has a strong rural basket, that is to say, it is mainly carried out in rural areas by the poor rural dwellers hence concern for agribusiness and rural development become synonymous, with a common root (Bigsten *et al.*, 2003).

There are many reasons for the existence of credit market failures. Some of the reasons are; high cost of setting up banking operations in rural areas, difficult information on potential borrowers, the risk of default on loans and absence of collateral to put up against loans. Accessibility to financial credit is considered as one of the engines of economic development, the establishment and expansion of financial services is described as one of the instrument to break the vicious circle of poverty that has eaten deep in the lives of the rural poor dwellers in Nigeria (Aruwo, 2004).

Federal and State governments in Nigeria have frequently identified the need for the development of small and medium scale agribusiness enterprises. One of such sectoral strategies is the introduction of institutions that could provide micro credit facilities for the small, medium and large scale, producers, processors and marketers of agricultural products (Aruwa, 2004). Despite all these efforts, rural small and medium scale agribusiness enterprises are still denied access to credit facilities thereby reducing their credit market participations. The formal financial service provided by banks are less accessible to the poor due to reasons of high cost of setting up banking operation in rural areas, absence of collateral to put up against loan etc. (Ellis, 2000).

The failure of the formal institution resulted in the increasing use of informal financial markets. The informal financial market is characterized by small loan size, short period of repayment, high interest rate; these problems resulted to the low credit market participation of agribusiness enterprises which in turn resulted to the low productivity, economic growth and development of the nation (Ellis, 2000). The challenges of increasing firms' productivity through increased participation in the credit market necessitate this study. This study was to determine the factors that influence credit market participation among agribusiness entrepreneurs in Abia State.

MATERIALS AND METHODS

Study Area

The study area is Abia State. Abia is one of the 36 states that make up Federal Republic of Nigeria. It is situated in the South-East geo-political zone of Nigeria. The state is located between latitudes 04⁰40' and 06⁰14' North and longitudes 07⁰10' and 08⁰00' East (INEC, 2008). Abia is bounded on the North and North East by Anambra, Enugu and Ebonyi States, to the West is Imo State, the East and South East are Cross River and Akwa Ibom States and South is Rivers State. It occupies 5834 square kilometers with a population of 2,833,999 (NPC, 2007).

Abia State is divided into three Agricultural zones, namely, Aba, Ohafia and Umuahia zones. About 70% of Abians both in the rural areas and urban areas are engaged in one agriculture and related agribusiness activity or another (ASFDO, 2005). The activities range from input production, supplies, processing to marketing and distribution of

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processed inputs production and supplies is being carried out mainly in the rural areas of the state, while the processing, marketing and distribution of processed inputs is mainly performed in urban areas like Aba and Umuahia by some firms.

Sampling Techniques

Purposive and random sampling techniques were used in this study. First, Umuahia agricultural zone was chosen purposively. This is because, it is in this zone that majority of the formal credit institutions are located, given that the state capital Umuahia is in this zone. Secondly, two Local Government Areas from the zone were also purposively selected, based on the fact that they are the two rural areas nearest to the state capital Umuahia and has large number of agribusiness entrepreneurs. They are Ikwuano and Umuahia South Local Government Areas. Two communities in Ikwuano and Umudike were randomly selected, while Ubakala and Nsirimo were selected from Umuahia South L.G.A. Afterwards, random sample of 20 agribusiness enterprises were drawn from the communities to give a total sample size of 80 respondents.

Data Collection and Analysis

Primary data were used for the study. Primary data were collected using a structured questionnaire which was administered to the respondents. Probit model was used in analyzing the data.

Model Specification

The implicit form of the model takes the basic form as:

$$Y_i = \beta_0 + \sum_{j=1}^n \beta_j X_{ji} + \epsilon_i$$

Where: Y_i is the observed response (1 or 0) for the entrepreneur. Y_i is the underlying stimulus (access to credit).

$i = 1, 2, \dots, n$ is the index of observations, the sample size,

X_{ji} is the j th explanatory variable for the i th observation.

$j = 0, 1, 2, \dots, n$, where n is the total number of explanatory variables.

In this study, the following variables were used.

Y = Participation in credit markets (1 = yes; 0 = otherwise)

X_1 = Educational attainment (years)

X_2 = Age (years)

X_3 = Sex (dummy) 1 = male, 0 = female

X_4 = Years of experience (years)

X_5 = Repayment period (years)

X_6 = Family size (No.)

X_7 = Income from Agribusiness enterprise (₦)

X_8 = Loan from non-Agribusiness enterprise (₦)

X_9 = Loan processing time (years)

X_{10} = Interest rate (%)

X_{11} = Demand for collateral "1" represents "YES"; "0" represents "NO"

ϵ_i = error term

The output of the probit model parallels the output from traditional Ordinary Least Squares (OLS) estimate techniques (Wooldridge 2000; Green, 1993; and Statacorp, 1999). The parameter estimate of the independent variable (β_j) is reported with an (asymptomatic) standard error and t-test. However, interpretation of the parameter estimates is slightly different. Each one unit increase the explanatory variable (x_{ji}) leads to increasing the probit index by 0.08233 standard deviation (Statacorp, 1999).

RESULTS AND DISCUSSION

From the results of the analysis, educational attainment of the agribusiness operators, family size, size of enterprise, interest rate and the demand for collaterals were significant at various levels and with different signs in determining access to credit.

Education was significant at five percent level and had a positive coefficient. This indicates that the higher the educational attainment of the entrepreneur, the higher the probability of the entrepreneurs participating in credit markets. Education is rated according to the number of years spent in school. Entrepreneurs with higher education tend to make better decisions, particularly those regarding to inputs and technology. This result is in line with Abebe (2002) and Hussein (2007).

Family size of the entrepreneurs was seen also to be significant at one percent and positive. The result could be interpreted to mean that the larger the size of the family of the entrepreneurs, the more he or she is willing to participate in credit markets. This could probably mean that with higher number of people in the household, there is the tendency of increasing responsibilities and thus increased liquidity constraints, which may warrant the demand for financial resources. This result is consistent with Chowdhury (2005). Size of the enterprise was also significant at one percent level and with a positive coefficient. This means that at the size of the enterprise increases, the probability of credit market participation increases. Entrepreneurs with large holdings are often times assumed to be less risky in terms of credit repayment. Given this, they are given preferential treatment by financial institutions. This may serve as boosters in their participation. This is similar to the finding of Chowdhury (2005) and Milanzi (2003).

Interest rate and demand for collaterals were significant and had negative coefficients. Their risks were at one percent risk level. The implication is that there is a negative relationship between interest rate and demand for collaterals and credit market participation in the study area. This means that as the interest rate and the demand for collaterals increases, there is a decrease in the participation of the entrepreneurs in the credit market. This is probably because with increasing interest rate and demand for collaterals, entrepreneurs tend to avoid credit markets. This result is also in line with Lawal *et. al.*, (2009) in their study on determinants of constraints to credit access among cocoa farming households in Osun state, Nigeria. The chi-square value is 41.445 and DF value 30, which were all significant at one percent level indicating that the model had a good fit.

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Table 1: Estimates of the determinants of credit market participation among small scale agribusiness entrepreneurs in the study area

Variables	Coefficient	Standard error	T-values
Education	0.47465	0.19027	2.49461**
Age	0.20821	0.26622	1.553335
Sex	0.9960	0.15142	0.065778
Years of Experience	-0.0147	0.1049	-0.014038
Repayment period	-0.09025	0.4785	1.88610
Family size	0.18853	0.7060	2.67039***
Size of enterprise	0.6070	0.1200	5.05883***
Loan from non-agribusiness enterprise	0.0000	0.0000	0.082723
Loan processing time	0.332070	0.98834	0.032449
Interest rate	-0.43627	0.13532	-3.22398***
Demand for collaterals	-0.44854	0.16252	-2.75991***
Constant	-0.11206	1.4154	-0.010759

Chi- Square = 41.445, DF = 30, P –value 0.080, Note: ** = 5% significant level, *** = 1% significant level.

Source: Computations from Field Survey, 2010.

CONCLUSION

The study confirmed that participation of entrepreneurs in agricultural credit market in the study area on several variables like; educational level, firm size, family size, interest rate, demand for collaterals and loan processing time. To help increase agricultural credit market participation which will in turn foster economic development in both urban and rural areas, the following are recommended.

Government should formulate a policy on rural banking whereby the existing micro-finance and commercial banking institutions situated in the rural areas can advance loans to farmers without much emphasis on collaterals and other requirements that are not easy to provide by the rural farmers. The existence of the Nigerian Agricultural Cooperative and Rural Development Bank has not done much.

Since finance is the hallmark of economic developments, governments should try to make formal financing more affordable and available by minimizing the cost and regulations associated with participating in the formal banking sector.

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