ANALYSIS OF DEMAND AND ACCESS TO CREDIT AMONG SMALL AND MEDIUM SCALE AGRIBUSINESS ENTERPRISES IN ABIA, STATE, NIGERIA

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Abstract

The study analyzed the demand and anccess to credit among Small and Medium Scale agribusiness enterprises in Abia State, Nigeria. Multi- stage random sampling techniques were employed to select 120 respondents in the state. Primary data were collected with the use of well-stuctured questionnaires through the aid of enumerators. Relevant descriptive and inferential statistics such as frequencies, percentages, means and standard deviation. Hackman double hurdle model regression were used for data analysis. The results showed that a good proportion (52.50%) of the agribusiness small and medium scale operators in the study area were male with mean ages of 50years. Majority of the respondents were married (63.33%), while about (96.7%) were literate having acquired one level of education or the other. On avearage, the agribusiness operators have spent about 19 years in business. About 68.3% of them belong to cooperative society. The mean income of the respondents were #201,666.67% for an average small and medium scale operator. The results showed that the respondents obtained their credit from both formal and informal sources, with majority (53.33%) from informal sources, (46.67%) were from formal source. Also, majority (90.83%) demanded for short- time credit, while the mean and standard deviation of credit demanded were #199,916.67 and #103,601.10 respectively for an average small and medium scale operators. The Hackman double stage model showed that interest amount, years of education, experience, Enterprise' age, income and membership of association of the agribusiness operators were significant determinants of volume of credt.

Result on performance of the agribusiness small and medium scale enterprises showed a total revenue and net profit were #201,166.67 and #35,814.54. Furthermore, simple linear regression mode on effect of demand of crediti on performance of small and medium scale enterprises showed there was a positive relationship between performance and credit access. Also result further showed that major constraints of credit access were burdensome collaterals (X=4.10), instability in government policy (X=4.02) and long protocols

(X= 3.95). The study therefore recommend that policy should also focus on ways to attract and encourage not only experienced but younger people willing in agribusiness small and medium scale enterprises, who are agile and strong in business drive through of credit to them, this group of operators would be able to put in a lot at raising the current level of performance.

1.0 INTRODUCTION

A productive resource such as credit is very vital for efficient and sustainable production activities among small and medium scale enterprises especially in developing countries, credit is among the essential factors needed for production, and with it, SME's can secure inputs such as; equipments and hired labour and is widely recognized as one of the intermediating factors between adoptions of technologies and increased income among SME's in Nigeria (Omonona *et al*., 2008, Akpan *et al*., 2013). It is one of the fundamental ingredients of sustainable production; as such its accessibility and demand is among the prerequisites for attaining the national goal of reducing poverty and ensuring self-sufficiency in production in the country (Nwaru *et al*., 2011 and Akpan *et al*., 2013). Credit is defined as the present and temporary transfer of purchasing power from a person who owns it to a person who wants it, allowing him an opportunity to command another person's capital for agricultural purposes but with confidence in his willingness and ability to repay at a specified later date (Konu, 2013; Nwani *et al*., 2004). Credit facilities are provided for SME's to enable them meet their fixed and variable cost needs if they cannot meet such needs with their personally generated/earned funds or retained earnings. Credit helps farmers to enhance their social relations and

to keep them out of poverty as it equally enhances the livelihood status of the farmers (Akpan *et al*., 2013).

Credit is very beneficial in SME's though it poses serious threat to most small scale entrepreneur as they are mostly unable to meet up with the terms of many credit facilities due to the scale of their enterprises. Access to credit facilities is, therefore, limited to entrepreneurs (Munyambonera *et al*., 2012). They lack the basic requirement and information for accessing such credit facilities as overdraft, which provide short-term loans to entrepreneur only when their cash accounts actually run dry, or provide short-term loans to companies when they need supplemental cash for various purposes (Oladele and Olagunju, 2013).

Small and Medium scale Enterprises (SMEs) are non-subsidiary, independent firms which employ fewer than a given number of employee. The number varies across country, but the most frequent upper limit designating an SME is 250 employee (OCED, 2005). A lot has been said and written about SMEs the world over. It has also formed the subject of discussions in so many seminars and workshops both locally and internationally. In the same token, governments at various levels (local, state and Federal levels) have in one way or the other focused on the Small and Medium Enterprises. While some governments had formulated policies aimed at facilitating and empowering the growth and development and performance of the SMEs, others had focused on assisting the SMEs to grow through soft credit and other fiscal incentives. (Dalberg, 2011).

2.0 LITERATURE REVIEW

SMEs play an important role in all the economies of the world (Mira, 2006). In developing countries, SMEs contribute to job creation, income generation and distribution (Temtime and Pansiri, 2006; Machacha, 2002; Lange et al., 2000). They

provide a breeding ground for entrepreneurs and employment (Thurik and Wennekers, 2004). For instance, in India, SMEs have been consistently outperforming large companies on crucial parameters such as growth in production and growth in employment. The sector accounts for 40 per cent of the industrial production, 35 per cent of the total exports and provides about 80 per cent of employment in the industrial sector (Sharma and Bhagwat, 2006). In Singapore, 51 per cent of the total workforce is employed in the small- and medium-scale sector, and in particular SMEs in the manufacturing sector accounts for 15 per cent of gross domestic product (Lukacs, 2005). In Hong Kong, SMEs are the largest employers with over 1.4 million people and in Japan 81 per cent of the employment is in the SMEs sector (Lukacs, 2005).

The findings revealed a positive and significant relationship between credit terms, credit accessibility and the performance of agricultural cooperatives; the two independent variables explain about 17.6% of the performance of agricultural cooperatives. The study reveals that credit accessbility is the most significant determinatnt of the performance of agricultural cooperatives. To attain a higher performance level of agricultural cooperatives, better mechanism for accessing credit must be put in place and credit terms/lending policies must be simplified/revised.

Sunday, Okezie, and Onyenkazi, (2014). carried out a study to ascertain the determinant of credit use among smallholder rice farmers in Bende Local Government Area of Abia State, Nigeria. Data were collected from 95 rice farmers selected randomly. Date were analyzed using descriptive statistics and least square technique. Data revealed that credit were obtained from both informal and formal sources. Credit from friends and relative

were the most popular source. The study showed that (10%) of the amount of credit demanded was actually received by farmers. Farm size, farming experience and marital status were significant determinant of credit use. The major problem militating against access to credit is insufficient funds. The study recommends that special loan scheme which reduces administrative bureaucracy should be inaugurated in rural area through microfinance banks.

Idu and Sunday (2016) worked on Gender and Access to Agricultural Credit in Abia State, Nigeria. A multistage random sampling technique was adopted to select 120 respondents comprising of 60 male and 60 females respectively which represent the sample size. A well-structured questionnaire was used to collect information from the respondents. The data collected were analysed using both descriptive statistics such as percentage, mean and percentage and inferential statistics such as logistic

regression model. The results of the socio-economic characteristics revealed that mean ages were 43.83 and 39.17 years for both male and females respectively. that majority of the respondents were married for both male (53.3%) and female (56.7%). The mean hectare cultivated is 1.57 and 1.52 for female and male farmers respectively. Majority (95%) and (76.7%) of the respondents have formal education for both female and male. Farming experience shows that on average the farming household has spent about 6.74 and 8.17 years have been spent in farming by both female and male respectively. The result shows that friends and relatives constituted the major source of credit for both female and male farmers in the study area. Majority 55% and 58.3% of the household had access to microcredit for female and male respectively. Econometric analysis from the logistic regression model shows that coefficient of variables relating to Age, Formal education, household

expenditures, cost of fertilizer, cost of labour, farm size and farm income are the significant variables influencing access to microcredit by the male respondent while variables relating to Age, formal education, household expenditures, cost of labour and farm income are the significant variables influencing access to microcredit by the female respondent. The $X2$ and the Likelihood Ratio value indicate a goodness of fit for the equation. The main constraint militating farmers access to micro credit was long protocol; provision of c microcredit and other infrastructure, especially through government and non-government agency, were recommended.

Lloyd, Baiyegunhi, Gavin and Fraser (2014), investigate Smallholder farmers' access to credit in the Amathole District Municipality, Eastern Cape Province, South Africa This study investigated the individual and household characteristics that influence credit market access in Amathole District Municipality, Eastern Cape Province, South Africa, using a cross sectional data from smallholder farmers' household survey. The aim is to provide a better understanding of the households' level socio-economic characteristics, not only because they influence household's demand for credit but also due to the fact that potential lenders are most likely to base their assessment of borrowers' creditworthiness on such characteristics. The results of the logistic regression suggest that credit market access was significantly influenced by variables such as gender, education, households' income, value of assets, savings, dependency ratio, repayment capacity and social capital. Implications for rural credit delivery are discussed.

3.0 METHODOLOGY

The Ex-post-facto research design was adopted in this study is a form of descriptive research in which the independent variable had already existed and in which an

investigator starts with the observation of a dependent variable and then studying the independent variable for the possible relationship and effect on the dependent variable (Cohen, 2000). The research design is made up of two instruments viz: questionnaire and interview. The study was carried out in Abia State, the state is

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endowed with small and medium scale enterprises engaged in several business activities of which Agribusiness-SMEs are well represented. A large proportion of the SMEs are usually clustered around the major commercial, urban centers and some in the hinterlands especially the agro based SMEs

4.0 RESULTS

4.1 SOCIOECONOMICS CHARACTERISTICS OF SME'S OPERATORS

The Socio-economic characteristics of SME's operators is presented in Table 4.1. The data were analyzed using 120 respondents.

Table 4.1: Distributions of Respondents according to socioeconomic characteristics

Variables	Frequency	Percentage
Sex		
Male	63	52.50
Female	57	47.50
Age		
25-34	16	13.33
35-44	22	18.33
45-54	17	14.17
55-64	65	54.17
Mean	**50.41**	42.13
Std deviation	**6.964**	5.80
Marital status		
Married	76	63.33
Single	44	36.67
Education		
No formal Education	4	3.33
Primary	34	28.33
Secondary	58	48.33

Tertiary	24	20.00
Experience		
1 – 10	24	20.0
11 – 20	46	38.3
21 – 30	34	28.3
31 – 40	16	13.3
Mean	19	
Membership of Association		
No	38	31.7
Yes	82	68.3
Monthly Income		
10000-100000	24	30
110000-200000	48	60
210000-300000	16	7.5
310000-400000	32	2.5
Mean	**201,666.67**	
Std deviation	**103,542.14**	
Total	**120**	**100.00**

Source: field survey, 2019

4.2 SOURCES, TYPES, LEVEL OF ACCESS FOR CREDITS BY THE SME'S

Table 4.2 Sources, types of credit accessed by the agribusiness operators

Variables	**Frequency**	**Percentage (%)**
Source		
Informal	64	53.33
Formal	56	46.67
Total		
Type of credit		
Short time credit	109	90.83
Intermediate term credit	7	5.83
Long time credit	4	3.33
Level Of Access To Credits (₦)		
100,000 – 149,000	38	31.67
150,000 – 199,000	26	21.67
200,000 – 249,000	24	20.00
250,000 – 299,000	21	17.50
300,000 – 349,000	11	9.17
Mean	**199,916.67**	
Std deviation	**103.601.10**	
Total	**120**	**100.00**

Source: Field survey (2019)

The result shows that respondent obtained their credit from both formal and informal sources, with majority (53.33%) from informal source. While 46.67%% were from formal source. This concor with the findings of Motin et al (2014) where they points out that sources of investment credit in the region are mainly informal. Informal source identify in the area includes friend and family, private money lender, credit/thrift etc. Informal credit lender charge high interest rate up to 30% on credit granted which is unbearable for SME's operators and also they lend on interpersonal relationship basis.

Table 4.3 Parameter estimates of the Heckman Double Hurdle Model for determinants of access to credit and demand for credit by SMES

Variables	Access to credit		Demand for credit	
	Coefficients	Z-value	Coefficients	Z-value
Constant	-5.28	-1.66*	-3236.33	-0.11
Interest amount (X_1)	0.03	1.94*	-24.14	-0.21
Enterprise' size (X_2)	0.09	0.27	665.03	0.26
Education (X_3)	0.36	2.12**	14.5901	12.13***
Experience (X_4)	0.028	0.59	8.4272	2.08**
Enterprise' Age (X_5)	0.0000	2.26**	-0.178	-1.72*
Income (X_6)	-0.60	-1.87*	-4008.023	-15.8***
Collateral (Z_7)	-0.19	-2.67**	-206.56	-0.34
Cooperative (Z_8)	0.00	2.14**	1.86	11.14***

Wald chi^2 =51.05, Prob >chi^2=0.0000; Source: Field survey 2019 ***,**,* indicates significance at 1, and 5% and 10% respectively

The results justified the use of Heckman double hurdle model with rho value (0.54) which was significantly different from zero (0). Moreover, the likelihood function of the Heckman double hurdle model was significant (Wald chi^2 =51.05, with p≤ 0.0000) showing strong explanatory power of the model.

4.6 CONSTRAINING FACTORS TO CREDIT ACCESS AND DEMAND BY SMES

Table 4.4 Constraining factors to credit access and demand for credit

Constraint	Mean Statistic	Std. Deviation Statistic	Skewness Statistic	Std. Error	Kurtosis Statistic	Statistic	Remark
Delayed approval	3.59	0.940	0.489	0.192	-0.635	0.381	Accepted
High interest charges	3.88	0.835	-0.663	0.192	0.098	0.381	Accepted
Insufficient funds	3.83	0.876	1.090	0.192	0.832	0.381	Accepted
High cost of inorganic fertilizer	3.11	1.070	-0.945	0.192	-0.425	0.381	Accepted
Burdensome collateral	4.10	1.320	0.385	0.192	-1.549	0.381	Accepted
Long protocols	3.95	1.008	0.324	0.192	-1.008	0.381	Accepted
Instability in government policy	4.02	0.973	0.170	0.194	-1.261	0.386	Accepted
Poor access to good road	3.01	0.890	0.730	0.192	-0.150	0.381	Accepted
Lack of collateral for credit	3.14	1.097	-0.880	0.192	-0.648	0.381	Accepted
Grand total	3.63	1.00	0.08	0.19	-0.53	0.38	

Source: Field survey (2019) Very serious (4), Serious (3), Unserious (2), Do Not Know (1)

Decision rule: any mean response ≥ 3.0 was adjudged accepted while any mean responses < 3.0 was adjudged rejected.

Constraining factors to credit access and demand by the agribusiness operator is present in Table 4.5. The result shows that all the variables were perceived constraining factors to credit access and demand by the agribusiness operator, their mean value was greater than 3.0. The table further review the major constraint was 'Burdensome collateral ($\bar{X}$= 4.10), this was followed by Instability in government policy ($\bar{X}$= 4.02) and Long protocols ($\bar{X}$= 3.95). This implies that the first three problems are seen as the major problems. This is in agreement with the findings of Ololade and Olagunju (2013) where they reported that lack of collateral security, lack of guarantor, and high interest rate.

5.0 CONCLUSION

Credit is one of the fundamental ingredients of sustainable production; as such its accessibility and demand is among the

prerequisites for attaining the national goal of reducing poverty and ensuring self-sufficiency in production, based on the foregoing, the study therefore concluded that access to credit is determined by interest amount, years of education, experience, **enterprise' age**, income and membership of association of the agribusiness operators while demand for credit is determine by interest amount, years of education, **enterprise' age**, income and membership of association of the agribusiness operators. Finally an increase in the performance index will lead to increase credit demand of agribusiness enterprise.

6.0 RECOMMENDATION

i. Given that the male were more engaged in agribusiness SME's than their counterparts, female should be encouraged also by the government in giving those subsidies and encourage them to access credit as

their counterpart for greater performance.

ii. Policy should also focus on ways to attract and encourage not only experienced but younger people willing in agribusiness SME's, who are agile and strong in business drive through provision of credit to them, this group of operators would be able to put in a lot of effort at raising the current level of performance.

iii. The government should encourage credit institutes to give more loans to agribusiness SME's, by granting amount of credit requested by operators and with lower rate, to maximize their potential with respect to better performance.

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