Journal of Community & Communication Research
ISSN: 2635-3318
Volume 7, Number 2, December 2022
Accessible at: https://jccr.sccdr.org

FACTORS INFLUENCING LEVEL OF PARTICIPATION IN THE INFORMAL FINANCIAL MARKET AMONG FARM HOUSEHOLDS IN ABIA STATE, NIGERIA

Okezie, C.R and, Agu-Aguyi, F. N
[1]Department of Agribusiness and Management, College of Agricultural Economics, Rural Sociology and Extension, Michael Okpara University of Agriculture, Umudike, PMB 7267 Umuahia, Abia State, Nigeria.

Corresponding Email: okezie.chidinma@mouau.edu.ng | rosynma2003@gmail.com

ABSTRACT

The study evaluated factors influencing the level of informal financial market participation among farm households in Abia State, Nigeria. A multistage random sampling technique was used to sample 150 farm household heads. Primary data were collected with the use of a well-structured questionnaire with the aid of enumerators. The data collected were analyzed using descriptive and inferential statistics such as frequency, means, and Tobit type 2 regression model. Among farm households, the major sources of Informal financial market were ROSCAs/ASCRA/thrift (88.79%), family and friends (76.68%), and money lenders (43.05%). The result of the Tobit regression analysis showed that marital status ($p<0.05$), household size ($p<0.01$), and interest rate ($p<0.01$) were significant and negatively affect the level of participation, while gender ($p<0.05$), farm size ($p<0.01$), income ($p<0.01$), and guarantor ($p<0.05$) were significant and positively related to the level of participation. Based on the results, the level of farmers' participation in the informal financial market should be encouraged through farmers' associations. This will help in the involvement of borrowers in both operational and policy decisions which constitute strong participatory elements in the management of credit and also, help to unleash the inherent social capital and information advantages for improved informal financing. It was also recommended that farmers' associations organize training about savings mobilization as a kind of credit scheme that can help in improving their level of accessibility to credit.

Keywords: *informal financial market, farm household, level of participation, Abia state, Nigeria*

INTRODUCTION

The rural financial market in developing countries is composed of formal, semi-formal, and informal financial institutions which can be described as catalysts in the mobilization process between the savings and investment needs of the people (Ibitoye, 2019). According to Ibitoye (2019), informal financial services refer to all transactions, loans, and deposits that take place beyond the functional scope of various countries' banking and other financial sector regulations. This include, activities of intermediaries such as relatives and friends, traders, and money lenders. Informal financial institutions are also defined as individuals and or groups that are collectively owned and managed by members. These groups mobilize savings from individuals and provide short-term loans to members, and sometimes to non-members, at varying interest rates, depending on their structure. Okezie, (2022) found that the major players in the informal financial market are friends, relatives, money lenders, and informal institutions (co-operatives, savings, and credit societies or unions, rotating savings and credit associations, and non-government organizations). They operate at the community or village levels in rural areas and urban areas too. They are sometimes the only financial providers actually able to lend directly to farmers and span the so-called "last mile" or "frontier" of smallholder finance (Delberg global development advisors, 2014). Also, informal financial markets attend to the diverse needs of the populace such as consumption smoothing, enterprise financing, promoting savings discipline, and intermediation between savers and borrowers as stated in ILO,(2015) and Okezie,(2021).

In Nigeria, the majority of the population is poor and predominantly engaged in the informal sector where there is no guarantee of income and capacity to provide collateral/ security for credit facilities; thus, perpetuating poverty by limiting their access and level of participation to reliable and affordable finance which is a major constraint for millions of smallholder farmers who depend on agriculture for both food and income (Okezie, 2019a). Also, Formal financial institutions have avoided or failed to offer adequate financial services to smallholder farmers in rural areas (Muhongayire, 2013; Okezie,2019a), and without a well-functioning financial market; farm households do not have prospects for increases in any significant and sustainable way their productivity and living standards. Farmers participate in the credit market to get access to financial resources and the extent of participation which is related to the level of penetration (Muhongayire, 2013), is constrained by a lack of collateral and lack of sufficient capital (Ton, 2010). Irrespective of the government's effort to provide credit at a subsidized

interest rate to farmers, the informal credit market still occupies up to 85% of the total rural savings and credits (Adegoke, 2014), and serves as an important gateway through which rural farming communities can access much-needed capital.

Informal finance, although important and has proved successful in meeting the credit needs of farmers,(Okezie,2019a) has not attained a scale and coverage to make a significant impact on the credit needs of farm households probably due to limited resources mobilized which restrict the extent to which they can effectively and sustainably satisfy their credit needs (Schroeder & Gertrud, 2009). Thus to effectively and sustainably meet the credit needs of farmers in Abia State, this study sort to ascertain the level of informal credit accessed by farmers.

METHODOLOGY

Study area and sampling procedure

The research was conducted in Abia State, Nigeria. The state is located in South Eastern Nigeria and lies between Longitude 04^0 45' and 06^0 07' North and Latitude 07^0 00' and 08^0 10' East. The state is divided into 17 local government areas, organized within three (3) agricultural zones namely, Umuahia, Aba, and Ohafia agricultural zones. Its population stood at about 2,883,999 persons with a relatively high density of 580 persons per square kilometer (NPC 2008).

The population of the study consists of farm households that accessed credit from informal financial institutions in Abia State. A multistage sampling technique was used to select the representative sample. First using simple random selection, the study selected two agricultural zones from the three zones – Umuahia and Ohafia. Secondly, in each of the agricultural zones selected, two LGAs were randomly selected. They are Ikwuano and Umuahia North in Umuahia agricultural zone; Bende and Ohafia in Ohafia agricultural zone. In the third stage, two communities from each LGA were randomly selected making a total of eight communities studied. And lastly, from each selected community; based on the list of farmers who participated in informal credit markets obtained from resident Agricultural Development Programme (ADP) Officers and enumerators, fifteen farmers had borrowed from the informal institution in the last two years prior to data collection were randomly sampled. A total of one hundred and twenty respondents were sampled. Primary data were collected from respondents using a well-structured questionnaire and oral interview. Data were analyzed using descriptive statistics such as frequency, percentages, and means and inferential statistics such as the Tobit regression model.

Empirical model specification:

Description of variables used in the Tobit model:

Y = amount borrowed (total loan amount in naira received from the major source only in the last two years prior to data collection)
Z_1 = Gender of farmer (1 = male, 0 = female)
Z_2= Age of the household head (years)
Z_3 = Education (Years of formal education)
Z_4 = Marital Status (1 = Married, 0 = Otherwise)
Z_5 = Household size (Number of household members)
Z_6= Farm size (Total household farm size in hectares)
Z_7 =Total household income (receipts of the farm sales in the last year, including non-farm income (₦))
Z_8 = Asset (Value of productive assets owned (₦))
Z_9 = Distance to alternative financial institution (Bank) (Kg)
Z_{10}= Visit (number of times visited by loan agents/officers in a year)
Z_{11}= Main occupation (farming = 1, 0 = otherwise)
Z_{12} = Interest rate (the total amount paid as interest charges on money borrowed (₦))

Z_{13} = Guarantor (a person who pledges that a debt will be paid (1 = guarantor was available, 0= otherwise))
Z_{14} =Social capital (membership of farmers association, (1 = borrower is a member, 0 = otherwise)).
Z_{15} = Farming experience (number of years in farming)
Z_{16} = Repayment period (time taken to pay back borrowed money (months))
u = Error term

Difference of mean test
Z-test was used to test hypotheses.

RESULTS AND DISCUSSION

1. Informal credit sources participated by farm households in the study area

Table 1. shows the informal credit sources participated by farm households in the study area. Majority (88.79%) of the respondents participated in Rotating savings and credit associations(ROSCAs)/Accumulating savings and credit association(ASCRA)/thrift, followed by family and friends (76.68%), money lenders; others were the least with 43.05% and 12.56% respectively. Informal credit markets mostly adopt a group solidarity approach which involves mutual trust among the individuals who are pursuing common objectives as this could provide loan guarantee and boost confidence among them. This result is in consonance with Bullen (2004).

Table 1: Percentage distribution of respondents according to informal sources participated.

Sources	Frequency*	Percentage
Money Lenders	96	43.05
ROSCAs/ASCRA/thrift	198	88.79
Family & Friends	171	76.68
Others	28	12.56

Source: Field survey, 2019. *= multiple responses

2. Difference of mean test

The difference of mean test was done to ascertain if there was a statistical difference between the total amount of credit requested and the total amount of credit received (borrowed) by the respondents in the study area.

From Table 2, the means of the total amount of credit requested and the total amount of credit received were 233,620 and 172,670 respectively which implies that for every ₦233,620 requested that the farmer received an average of ₦172,670. This showed a statistically significant difference between the total amount of credit requested and the total amount

received by the respondents at the P<0.01 level. Thus the null hypothesis of no significant difference between the amount of credit requested and the amount of credit received is rejected since the tabulated Z is less than the calculated Z.

Table 2: Result of the total amount of credit requested and the total amount of credit received (Borrowed)

	Mean	Standard Deviation	Z- Cal	Z-Tab	P-value
Amount requested	233,620	193,100	8.307***	1.96	0.000421
Amount received	172,670	135,570			

Source: Field survey, 2019. *** = significant at 1%.

The inadequate amount of credit granted to applicants might limit their capacity to finance their farm investment plans thereby affecting farm output and productivity negatively. This result confirms earlier findings of Oboh and Ekpebu (2011) which showed that the mean value of credit received by arable crop farmers in Benue State, Nigeria was significantly lower than the mean value of credit demanded at one percent (1%) level of significance.

3. Factors influencing farm household's level of participation in informal credit markets in the study area

Level of farm household participation in the informal credit market

The result in Table 3. shows the Tobit regression estimates on the factors that determine the level of participation in the informal credit market in the study area. The result showed Pseudo R^2 of 46% (0.4660) showing the explanatory power of the model. Eight out of sixteen variables significantly influenced the level of participation in the credit market as shown in table 3 below.

The coefficient of gender was statistically significant at p<0.05, positively signed, and related to the credit amount received. This showed that male-headed households received a larger volume of credit than female-headed ones, probably because females are often involved in small farm businesses which need smaller loans. Again, males are more advantaged probably because they have more access to and control over vital production resources than females and have continued to dominate farm decision-making (Okezie, 2021; Okezie, et al., 2021 and Enete, & Amusa, 2010). This result is in line with the study of Armendariz and Morduch (2010), which investigated the economics of microfinance in China and reported a positive relationship between credit amount received and gender.

The coefficient of education was negative and statistically significant on the level of participation at p<0.01. The implication is that amount of credit received by household heads had an indirect relationship with the educational level of the household head. This implies that household heads with less education received a higher amount of loans. This may be because higher education may endow the head of households with the requisite skills to find a paid job and reduce their need for credit. This result is similar to Essien, Arene, and Nweze (2013).

Table 3: Parameter estimate of factors influencing the level of household participation (the amount borrowed) in the informal credit market

Variables	Coefficients	Standard Error	t-values
Constant	147604.8	49754.37	2.97***
Gender	1271.53	552.2933	2.30**
Age	-0.5913	2.95705	-0.02
Education	-3850.892	1389.821	-2.77***
Marital status	-0.0955	0.0418957	-2.28**
Household size	-82.3979	28.26355	-2.92***
Farm size	33962.62	5280.836	6.43***
Income	0.9999	0.0002131	4691.48***
Asset	1.0038	0.0024435	410.81
Distance	-2969.429	8.859394	-1.90
Visit	18.4426	116.9875	0.16
Major occupation	2.0974	7.437921	0.28
Interest rate	-4.6018	1.570166	-2.93***
Guarantor	1114.717	479.2193	2.33**
Social capital	20.84728	41.13438	0.51
Farming experience	-0.2420	2.565213	-0.09
Repayment period	12,0123	7.388205	1.63
Pseudo R^2	0.4660		
LR Chi^2 (15)	2207.67		
Prob >Chi^2	0.0000		
Sigma test	331.6266		18.70***
Log-likelihood	-1264.7259		
Left censored observation	83410.5		

**, ***indicates significance at 5% and 1% respectively.
Source: Field survey, 2019.

The coefficient of marital status was negative and significant at p<0.05. This means that households with single heads such as the divorced, separated, widowed, and unmarried tend to receive a larger volume of loans than married heads. This result is supported by Del-Rio and Young (2005) who noted a negative impact of being married on the loan amount. They observed that single and divorced receive higher loan amounts than married.

The coefficient of household size was negative and statistically significant at p<0.01. Indicating a high probability of borrowed amount when the household size is small. Kedir (2011) in

Ethiopia, found a similar result and argued that larger households were likely to be income poor and hence lacked the means to participate and receive the amount requested from the credit market thus larger households face a risk of not benefiting from the credit market. The result is also consistent with Okezie (2019b), Okezie, (2021), and Okezie, et al (2021) who reported a negative relationship, in the sense that large family size actually decreases the level of participation and that larger household were likely to be income poor and hence lacked the means to participate and receive the amount from the credit market thus larger households face a risk of not benefiting from the credit market as they are likely to divert such services to meet their consumption needs which may lead to default. The possible explanation given by the author is that the increased family size might be a reflection of an increased number of earning members in the household.

Furthermore, the coefficient of farm size was positively related to the amount of credit received in the study area. It is also statistically significant at $p<0.01$. Informal credit lenders/suppliers will disburse funds based on the advantage of special information on their clients than any other lending source, as they are found among the people and larger farm sizes will attract more credit amounts all things being equal.

The coefficient of household income was positive and highly significant at $p<0.01$. This implies that household receives a larger volume of credit if their income is high than households with lower incomes. This result showed that the income of farmers could sometimes be used as collateral for borrowing. This result enforces the findings of Rweyemamu, Kimaro, and Urassa (2003), who in their study noted that a borrower farmer who has income opportunity, has a way of diversifying his sources of income and can therefore appear to be in a better position to attract and receive more loans compared to his counterpart. Also, as the total income increases, the household gains the confidence to increase the amount borrowed as they are assured of repaying it.

The coefficient of interest rate was highly significant at $p<0.01$ and negatively influenced the household's borrowing amount. This means that at a low-interest rate, the household receives a larger volume of credit. Relatively, a low-interest rate reduces the total amount to be repaid and will not strain the borrower unlike when the interest rate is high. This result is in line with the findings of Kausar (2013) who reported an inverse relationship between interest rate and the level of demand for microcredit.

Furthermore, the result of the Tobit model revealed that the coefficient of guarantor was positively related to the amount of credit received and statistically significant at $p<0.05$. The result implies that there is a direct relationship between the guarantor and the amount of informal credit received. This is *a prior* expectation as money lenders and other informal lending groups usually demand an individual that will stand as surety for the borrower. If the guarantor is a person of integrity, there is a possibility that the amount accessed may increase. This result agrees with Adnan (2005) who reported that through third-party guarantees, guarantors obligate themselves vis-à-vis the lender to comply with given payments to secure the debt of another party in the event of the borrower failing to repay.

CONCLUSION AND RECOMMENDATIONS

Eight out of sixteen variables significantly influenced the level of participation in the informal financial markets in the study area. The result showed that gender, education, marital status, household size, farm size, income, interest rate, and guarantor were the statistically significant variables affecting the amount of credit borrowed specifically. Marital status, household size, and interest rate negatively affected the level of participation: while gender, farm size, income, and guarantor were positively related to the level of participation.

Based on the findings, the level of farmers' participation in the informal financial market should be encouraged through farmers' associations, this will help in the involvement of borrowers in both operational and policy decisions which constitutes strong participatory elements in the management of credit and also, help to unleash the inherent social capital and information advantages for improved informal financing. Lastly, it is recommended that farmers' associations organize training about savings mobilization as a kind of credit scheme that can help in improving their level of accessibility to credit.

REFERENCES

Adnan, Z., Abdullah, H.S., & Ahmad, J. (2011). Direct Influence of Human Resource Management Practices on Financial Performance in Malaysian R&D Companies. *World Review of Business Research*, 1, 61 - 77.

Adegoke, I.A. (2014). The informal financial markets in Nigeria. In understanding monetary policy series number 43, Central bank of Nigeria. Pp, 1-30. www.cbn.gov.ng

Armendáriz, A., & Morduch, J. (2010).*The Economics of Microfinance* (*2ndeds*), Massachusetts: Massachusetts Institute of Technology Cambridge. MIT Press, Cambridge.

Bullen, F. A. (2004). Analysis of microfinance group savings linkage scheme in Cross River State Nigeria (Unpublished master's thesis). University of Calabar, Nigeria.

Dalberg Global Development Advisors. (2012). "Catalyzing Smallholder Agricultural Finance."

Del-Rio, A., & Young, G. (2005). The Determinants of Unsecured Borrowing: Evidence from the British Household Panel Survey, Working Papers, Bank of England.

Enete, A.A., & Amusa, T. A. (2010). Determinants of Women's Contribution to Farming Decisions in Cocoa-Based Agroforestry Households of Ekiti State, Nigeria. Field Actions Science Report www.factsreports.org.

Ibitoye, O.A. (2019), Informal Finance Options and Small and Medium Scale Enterprises Patronage in Nigeria: Empirical Evidence from Ekiti State (December 14, 2018). Available at SSRN: https://ssrn.com/abstract=3315109 or http://dx.doi.org/10.2139/ssrn.3315109

International Labour Organization(ILO) (2015). The importance of informal finance in promoting work among informal operators: a comparative study of Uganda and India / Michael Aliber; International Labour Office, Social Finance Programme. - Geneva: ILO, 2015 (Social Finance working paper; No. 66)

Johnston, J., & Dinardo, J. (1997). *Econometric Methods*. The McGraw–Hill Companies, Inc., New York.

Kausar, A. (2013). Factors affecting microcredit demand in Pakistan. International Journal of Academic Research in Accounting, Finance and Management Science, 2(4).

Kedir, A., Ibrahim, G., & Torres S. (2011). *Household-Level Credit Constraints in Urban Ethiopia*. Discussion Papers in Economics No. 07/03. Leicester, UK: Department of Economics, University of Leicester.

Muhongayire, W., Hitayezu, P., Mbatia, O.L., & Mukoya-Wangia, S.M. (2013). Determinants of farmers' participation in formal credit markets in rural Rwanda. *Journal of Agricultural Science, 4* (2), 87-94.

National Population Commission. (NPC) (2008). National Population Census, Federal Republic of Nigeria official gazette, Lagos, Nigeria.

Oboh, V.U., & Ekpebu, I.D. (2011). Determinants of Formal Agricultural Credit Allocation to the Farm Sector by Arable Crop Farmers in Benue State, Nigeria. *African Journal of Agricultural Research, 6*(1), 181-185. Available online at http://www.academicjournals.org/AJAR

Okezie, C.R. (2019a). Determinants of Farm Households Participation In Informal Financial Markets In South East, Nigeria. Unpublished Ph.D. Thesis. Department of Agricultural Economics, University of Nigeria, Nsukka.

Okezie, C. R. (2019b). Effect of participation in Agricultural support programmes on farmers' income in Abia State, Nigeria. Futo Journal Series (F U T O J N L S). 5 (2) 1 - 9. www.futojnls.org.

Okezie, C.R. Teran, A.D. & Enete, A. A (2021). Effect Of Informal Credits On Farm Household's Welfare In South East, Nigeria: A Quantile Regression Approach.

Nigerian Agricultural Journal. Volume 52(3) Pg. 293-301. Available online at: http://www.ajol.info/index.php/naj https://www.naj.asn.org.ng

Okezie, C.R. (2021). Effect Of Social Capital On Women Agriprineurs' access To Financial Services In Abia State, Nigeria. Nigerian Agricultural Journal. Volume 52(3) Pg. 98-104 Available online at: http://www.ajol.info/index.php/naj https://www.naj.asn.org.ng

Rweyemamu, D., Kimaro, P., & Urassa, O. (2003). Assessing Micro-Finance Services in Agricultural Sector Development. A case study of Semi-formal financial Institutions in Tanzania. *http://www.ifpri.org/2020/nw/nwpapers/tanzbr200308.pdf*

Schrieder, H., & Gertrud, R. (2009). "*Informal Financial Groups in Cameroon: Motivation, Organization and Linkages*." M.S. Thesis, Ohio State University, 2009.

Steel, W. F., & Aryeetey, E. (1994). Informal savings collectors in Ghana: Can they intermediate? *Finance and Development* – A Quarterly Publication of the IMF and the World Bank: 46.

Swain, R.B. (2007). The demand and supply of credit for households, Applied Economics, *39*(21), 2681-2692.

Ton, G. (2010). Resolving the challenges of collective marketing incentive structures that reduce the tensions between members and their group. *ESFRIM Working Paper 4.Paris/Wageningen, IFAP/AGRINATURA.*

Verbeek, M. (2007). *A Guide to Modern Econometrics.* Southern Gate, Chichester, West Sussex, England Hoboken, NJ: John Wiley & Sons.