

FACTORS INFLUENCING CHOICE OF BORROWING SOURCES IN INFORMAL CREDIT MARKET BY FARM HOUSEHOLDS IN EBONYI STATE, NIGERIA.

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ABSTRACT

The study estimated Factors influencing choice of borrowing sources in informal credit market by farm households in Ebonyi State, Nigeria. A multistage random sampling technique was through the adopted to select 150 household heads. Primary data were collected with the use of a well-structured questionnaire aid of enumerators. The data collected were analyzed using descriptive and inferential statistics such as frequency and multinomial logit regression model. The most source of informal credit respondents borrowed from were: Isusu/ASCRA/thrift (88.79%), family and friends (76.68%), and money lender (43.05%). Marginal effects of the Multinomial logit model analysis of factors that determined choice of borrowing sources by farm households showed that variables that positively and significantly influenced choice of borrowing from money lenders were education ($P < 0.01$), farm size ($P < 0.01$), farm size ($P < 0.01$), interest rate (0.01), borrowing experience ($P < 0.01$) and repayment period ($P < 0.05$) while gender ($P < 0.01$), age ($P < 0.05$) and asset value ($P < 0.05$) were negative and significant too. Marginal effects variables that were negative and statistically significant in determining borrowing from rotating savings and credit associations (ROSCAs) were gender ($P < 0.01$), loan size ($P < 0.01$), interest ($P < 0.05$), borrowing experience ($P < 0.01$) and repayment period ($P < 0.01$) while positive and significant variable was social capital ($P < 0.05$). Family and friends category was the base. It is recommended that the government and non-governmental agencies should redouble effort to improve education levels in the study area since education enhances people to arrive at more informed decisions about credits. And that membership of an association and the trust and acquaintance which help to bring about the inherent social capital and information advantages for improved informal financing should be encouraged as it will help involvement of borrowers in both operational and policy decisions.

Key words: choice, informal credit market, borrowing sources, Ebonyi State

INTRODUCTION

The informal institutions are creations of the indigenous people established for specific or general purposes, some of which mobilize local savings and make contributions periodically which are given out

as credit thus, making credit facilities more accessible to help solve their socio-economic problems (Gulong, 2012). It has permeated through government institutions and organisations notwithstanding that they are not controlled by government and its authorities. The essential characteristic of informal financial markets is that they are loosely organized, monitored and regulated than the formal financial system, despite informal control they are well organized with their own rules and discipline. They flourish in rural and urban areas; cater for the rich and the poor, farmers, workers, professionals and people with and without regular income (Mehreteab, 2005).

The informal sector in Nigeria is large, resilient and dynamic and occupies an important position in the overall development of the economy. The Nigeria informal sector accounts for 35 percent of Gross Domestic Product (GDP) or \$78.5 billion and contributes 80 percent of the labour forces in Africa (Finaccess, 2009). It covers a wide range of activities, including small and unregistered sole proprietor businesses and joint partnership businesses in the rural and urban areas. According to the World Bank (2005), the informal sector remains the leading provider of agricultural credit in Nigeria. Informal market contributes about 85% of the total rural savings and credits (Adegoke, 2014). The three most important sources of rural credit in Nigeria are all informal: Rotating Savings and Credit Associations (ROSCA), family, and friends. Commercial banks came fourth, with only 11 percent of rural dwellers sourcing credit from them. The Nigerian informal sector has two major components – the economic and financial segment and the administrative/political segment. The economic and financial segment comprises large number of highly competitive but poor capitalized small-scale operators and the informal financial institutions, which they have developed to sustain their businesses (World Bank, 2005).

According to Anderson and Baland (2007), informal associations are characterized by widespread phenomenon with membership of about 50 to 90% in Nigeria, Cameroon, Togo, Liberia and Gambia and are often the sole savings and credit associations found in rural areas.

Due to the prevalence of informal financial institutions in south east of Nigeria, most farmers patronize these institutions because they give easy access to withdrawing their money at any point in time and also, the farmers have full knowledge of how

these unions/associations function (Bime, 2008). Among these informal schemes in Nigeria are, as discussed by Aryeety and Udry (2007) the three types of informal financial units in Africa. These include (i) savings mobilisation that do little or no lending, that is, periodic savings; (ii) lending units that seldom engage in savings mobilisation (money lenders); and (iii) units that combine deposit mobilisation with amounts of lending, that is, rotating savings called *isusu* in South Eastern, Nigeria. Aryeety and Udry (2007) went on to describe the first unit as savings collectors. They may or may not engage in lending and the member merely collects what he or she saved at the end of the agreed period. The second unit include money lenders who seldom engage in savings mobilisation, but, in lending money while the third units of the informal market include savings and credit associations and credit unions that take deposits and so lend in various forms to members and non-members.

The economic significance of choice of informal lending and borrowing between money lenders, friends and relatives in developing economies has been largely ignored in the finance literature. This is problematic since a number of studies have provided some remarkable results as to its importance (Huo and Qu, 2005). Sabapathy (1994) found that informal finance is heterogeneous and dynamic. This means that informal financial institutions are diverse in character. It also entails that they differ in criteria for membership, the conditions for obtaining credit and the use of credit or savings by the client. Each informal financial institution is unique in the sense that the people running informal financial institutions decide how the institution must operate. It follows that informal financial activities differ from place to place. This paper attempts to explore the analysis of the factors distinguishing the choice of informal financial services, in a rural-urban area of Ebonyi State, Nigeria.

METHODOLOGY

Study area and sampling procedure

The study was carried out in Ebonyi State Nigeria, its coordinates are 6°15'0" N and 8°4'60" in DMS (Degrees Minutes Seconds) or 6.25 and 8.08333(in decimal degrees) and it is one of the 36 States of the Federation and one of the five States in the South-East geo-political zone of Nigeria with its capital at Abakaliki. The state is split into three agro political areas – Ebonyi South with five local government areas (LGAs), Ebonyi North and Ebonyi Central zones with four LGAs each. It lies between latitudes 5°0' 40' and 6°0' 45' North and longitudes 7°0' 30' and 8°0' 46' East of the greenwich meridian (Awoke and Okorji, 2004). It occupies a land area of about 5,935 square kilometres with a roughly population of about 2.8 million people (CBN, 2018). The basic occupation of the people is farming. Crops cultivated in the State include: cassava, rice, yam, sweet potato, oil palm,

pepper, okra, and groundnut. Animals include poultry, goats, and sheep, are also produced in the State. Given its geology, the State has great potentials for solid minerals. Traditional industries and works of art. Its mean annual rainfall is between 1,500mm to 1,800mm (Awoke and Okorji, 2004).

The study used both probability and non-probability sampling. First using simple random selection, the study selected two agricultural zones from the three zones – Ebonyi North and Ebonyi South. Secondly, in each of the agricultural zones selected, two LGAs were randomly selected. They are Abakaliki and Izzi in Ebonyi North; Afikpo South and Ivo in Ebonyi South. 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; fifteen farmers that have borrowed from informal institution were randomly sampled. A total of one hundred and twenty respondents were sampled and primary data were collected using a well-structured questionnaire. Data were analyzed using both descriptive statistics such as frequency, percentages, mean and inferential statistics using multinomial logit regression model.

Empirical model specification

Multinomial logit model was used to estimate farm households' choice of borrowing from informal sources, following Rahji and Fakayode (2009); Ojo et al., (2013). The farm households was categorized into three based on the choice of borrowing in informal market as discussed by Aryeety and Udry (2007), the three types of informal financial units in Africa. The groups (types) are money lenders, family and friends and savings and credit association (SCA). For purposes of this analysis, choice was restricted to major source of borrowing for each household.

The general form of the model is given as:

$$Pr(Y_i=1) = \frac{\exp(X_i\beta_1)}{1+\sum_{j=1}^3 \exp(X_i\beta_j)} \dots\dots\dots (1.1)$$

To ensure identifiability,

$$Pr(Y_i=0) = \frac{1}{1+\sum_{j=1}^3 \exp(X_i\beta_j)} \dots\dots\dots (1.2)$$

Where: *Y* is the observed outcome for the *i*th individual borrower and *X_i* is a vector of the *i*th explanatory variables. *β_i* is the unknown *i*th parameter.

$$P_i(Y=j) = \frac{\exp(\alpha_i X_j)}{1+\sum_{j=1}^4 \exp(\alpha_i X_j)} \text{ For } j=1,2,3 \quad (1.3)$$

$$P_{i0} = \frac{1}{1+\sum_{j=1}^4 \exp(\alpha_i X_j)} \text{ For } j=0 \quad (1.4)$$

P₁₀ is the probability of being in the reference group. In practice, when estimating the model, the coefficients of the reference group are normalized to zero (okezie, 2008; Rahji and Fakayode, 2009; Ojo et al., 2013) because the probabilities for all the choices must sum up to unity (Greene, 1993). Therefore, for 3

choices only (3-1) distinct sets of parameters can be identified and estimated. The natural logarithms of the odd ratio of equations (3.1) and (3.2) give the estimating equation (Greene, 1993) as:

$$\alpha_i X_j = \ln \frac{(P_{ij})}{(P_{i0})} \dots\dots (1.5)$$

This represents the relative probability of each of the groups 1, 2 and 3 to the probability of the reference group. Therefore, the estimated coefficients for each choice reflected the effects of X_i 's on the likelihood of the borrower households choosing that alternative relative to the reference group.

However, the coefficients of the reference group may be recovered by using the formula (Hill, 1983; Rahji & Fakayode 2009).

$$\alpha_3 = -(\alpha_1 + \alpha_2) \dots\dots\dots (1.6)$$

That is for each explanatory variable, the negative of the sum of its parameters for group 1 and 2 is the parameter for the reference group.

The function can be specified explicitly as:

$$P_{ij} = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \alpha_5 X_5 + \alpha_6 X_6 + \alpha_7 X_7 + \alpha_8 X_8 + \alpha_9 X_9 + \alpha_{10} X_{10} + \alpha_{11} X_{11} + \alpha_{12} X_{12} + \alpha_{13} X_{13} + u_i \dots (1.7)$$

Description of variables used in Multinomial logit regression model

Y=1= moneylenders, 2= family & friends, 3= savings & credit association (Number of times borrowed from the major source)

X₁ = Sex of farmer (1 = male, 0 = female)

X₂ = Age of the household head (years)

X₃ = Education (Years of formal education)

X₄ = Marital Status (1 = Married, 0 = Otherwise)

X₅ = Total household income = receipts of the farm sales in the last one year, including non-farm income (₦)

X₆ = Household size (Number of household members)

X₇ = Farm size (Total household farm size in hectare)

X₈ = Loan size = total amount of credit requested (₦)

X₉ = Social capital = borrowers acquaintance with lender (1 =borrower is acquainted (trust) with lender, 0 = otherwise)

X₁₀ = Interest rate = total amount the paid as interest charges on money borrowed (₦)

X₁₁ = Dependent Relatives = Children under 18 years and adults above 65 years (number)

X₁₂ = Borrowing experience = total number of years the borrower has been borrowing money for farming from the major source

X₁₃ = Repayment period = time taken to pay back borrowed money (months)

u = Error term

Results and discussion

1.0: Informal credit sources farm household borrowed from in the study area

Table 1. shows the informal credit sources farm households borrowed from in the study area. Majority (88.79%) of the respondents borrowed from Isusu/ASCRA/thrift, followed by family and friends (76.68%), money lenders (43.05%); others were the least with 12.56%. Informal credit markets mostly adopt 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 choice of informal sources participated.

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

Source: Field survey, 2019. *= multiple response

Factors that influence choice of borrowing sources in informal credit market in the study area

A multinomial logit model was adopted to determine the factors that affect choice of major informal credit market used by farmers. The coefficients of each choice (money lenders, rotating savings and credit association (rosca) and family and friends) reflects the effect of socio-economic and demographic variables on choice of a particular major informal credit source (type). The significance of the likelihood ratio chi-square (72.06) at 1% level implied that, the regression

had a good fit. The result also showed the set of significant explanatory variables as compared with the reference/base category (family and friends). To augment the interpretation of the estimated results presented in Table 2, the marginal effects (dy/dx) of each variable on the predicted probability of farm households' choice of borrowing sources, evaluated at the means of the explanatory variables were used and also presented. The result provided the probability estimation for the likelihood of borrowing from source(s) of informal credit market among farm

households with respect to a unit change in the statistically significant explanatory variables: gender, age, education, farm size, loan size, social capital, interest rate, asset value, borrowing experience and repayment period. The model showed that nine of the explanatory variables were statistically significant in determining whether respondents demand/borrow from money lenders while six of the explanatory variables were statistically significant in determining whether respondents demand/borrow from rotating savings and credit association (ROSCA) than borrowing from family and friends.

The coefficient of gender was negative and significant at $p < 0.05$ for borrowing from both money lenders and rotating savings than borrowing from family and friends. The marginal coefficient of gender (-0.3197) was negative and statistically significant on money lenders at $p < 0.01$. This implies that, an increase in the

number of male headed farm households will have a marginal effect of reducing the probability of borrowing from money lenders as a source of informal credit by 0.3197 (31.97%) and also increases the probability of using family and friends as a source of borrowing; while increase in the number of female headed farm households will increase borrowing from money lenders as a source of informal credit by 31.97% than borrowing from family and friends. Also, marginal coefficient of gender (-0.2141) was negatively significant at $p < 0.01$ for ROSCA, implying that female headed households borrow from ROSCA more than their male counterparts. It shows that an increase in the number of male headed farm households will have a marginal effect of reducing the probability of borrowing from ROSCA by 21.41% than borrowing from family and friends.

Table 2: Parameter estimates and marginal effects of determinants of choice of borrowing from sources of informal creditmarket

Variables	Money Lenders Coefficients	Standard Error	Money Lenders Marginal Effects	Standard Error	Rotating Savings Coefficients	Standard Error	Rotating Savings Marginal Effects	Standard Error
Constant	13.9447 (2.84)***	4.90875			14.2838 (3.16)***	4.524228		
Gender+	-4.0316 (-2.20)**	1.836065	-0.3197 (-4.12)***	0.07769	-1.6624 (-1.99)**	0.8358679	-0.2141 (-2.61)***	0.08217
Age	-0.4340 (-2.21)**	0.1962065	-0.0434 (-2.09)**	0.02074	1.1329 (2.32)**	0.4882414	0.1132 (1.93)	0.05863
Education	3.3954 (2.18)**	1.557613	0.5229 (2.67)***	0.1961	2.8296 (1.95)	1.445459	0.1296 (1.25)	0.10402
Marital Status+	0.0645 (1.41)	0.0457969	0.0064 (1.51)	0.00425	0.0647 (1.41)	0.0458958	0.0065 (1.51)	0.00427
Income	5.44e-06 (1.69)	3.22e-06	5.50e-07 (1.20)	0.00000	4.20e-06 (0.50)	8.33e-06	4.18e-07 (0.48)	0.00000
Household Size	0.0784 (1.83)	0.0427532	0.0078 (1.64)	0.00477	0.0152 (0.21)	0.0739264	0.0016 (0.21)	0.00771
Farm Size	14.3518 (2.65)***	5.404892	1.4209 (2.93)***	0.48494	0.0842 (0.73)	0.1151059	0.0086 (0.81)	0.01062
Loan Size	3.75e-06 (0.44)	8.51e-06	3.70e-07 (0.42)	0.00000	-0.0000 (-2.90)***	0.0000154	-1.46e-06 (-2.63)***	0.00000
Social Capital+	3.4206 (2.14)**	1.596262	0.5314 (2.65)***	0.20065	0.4322 (2.12)**	0.2034364	0.0432 (2.08)**	0.02078
Interest rate	0.0001 (2.53)***	0.0000422	4.80e-06 (2.72)***	0.00000	-0.0001 (-2.38)**	0.0000444	-0.0000 (-2.62)**	0.00003
Asset value	-0.0000 (-2.37)**	0.0000392	-0.0000 (-2.35)**	0.00001	0.0000 (0.33)	0.0000723	2.44e-06 (0.32)	0.00001
Borrowing Experience	3.8476 (2.73)***	1.411268	0.1297 (1.28)	0.10136	-4.0316 (-2.21)**	1.827028	-0.3197 (-4.10)***	0.07798
Repayment Period	1.1371 (2.44)**	0.4655356	0.1136 (2.35)**	0.04822	-14.3939 (-1.89)	7.614087	-1.4269 (-2.89)***	0.49452
LR Chi2 (26)	72.06***							
Prob > Chi ²	0.0000							
Pseudo R ²	0.4351							
Log likelihood	-60.832171							

, * denotes 5% and 1% significant respectively. (+) dy/dx is for discrete change of dummy variable from 0 to 1

Source: Field survey, 2019.

The result implies that women farmers are more likely to borrow from money lenders and rotating savings than their male counterparts. This result could be attributed to the fact that women borrow smaller amounts for businesses unlike men, hence they tend to patronize the informal credit markets more. This result is substantiated by the findings of Kimuyu and Omiti (2000) that, a greater proportion of female entrepreneurs borrow from NGOs and Nonbank financial Institutions. Also, similar findings have been found by Owuor (2009) who indicated immense involvement of women in rural economy as well as the fact that women get more attracted to micro-credit groups that peg no tangible collateral to lending. This is because majority of women in Africa still lack right to property to hold as collateral against credit.

The negative coefficient of age for moneylenders at $p < 0.05$ level implies that a unit increase in the age of household head will have a marginal effect of reducing the probability of choosing money lenders as a source of informal credit by 0.0434 (4.34%) than choosing to borrow from family and friends. This result is in line with the findings of Yuan et al., (2011) in China. They reported that age has an inverted u-shape when farmers choose informal credit following life cycle hypothesis. And that the inverted u-shape could be driven by the supply side as lenders in the informal credit market might prefer to grant loans to middle-age individuals. This is because these people generally have more stable income streams, which leads to lower default risk. The positive sign of the coefficient for ROSCA at $p < 0.05$ level implies that the probability of borrowing from ROSCA increases with increase in age of the respondents. One possible explanation to this could be that respondents were aged and are of low income group.

The coefficient of years of formal education was positive and significantly correlated ($p < 0.01$) with the choice of borrowing from money lenders. It means that, a unit increase in years of formal education of the farmer will have a marginal effect of increasing the probability of choosing money lender as a source of informal financing by 0.5229 (52%) than choosing family and friends as source of borrowing. Kgowedi, Makhura and Coetzee (2007) in Pretoria confirmed that, education increases the household head's probability of borrowing from money lenders. They reported that, the reason for their preference could be that, education correlates with being employed and thus, money lenders prefer to provide them with credit because they meet their requirements such as a permanent job.

The coefficient of farm size for borrowing from money lenders was positive and significant at $p < 0.01$. The result of the marginal effects on farm size indicated that, a unit increase in farm holdings of the farmers *ceteris paribus* would lead to 1.4209 unit increase in the probability of the household head borrowing from

money lenders. The result showed that the larger the farm size, the higher the probability of borrowing from money lenders than borrowing from family and friends. This result agrees with Gandhimathi and Vanitha (2010) and Wachekeh (2013) who revealed that large farm size (Land) could be used as collateral which money lenders accept in the absence of guarantors and one of the important factors that influence credit choice. Farm size is therefore viewed as a proxy for guarantor and also as repayment capacity since farm size determines production levels.

A negative and significant marginal effect on borrowing from rotating saving and credit association was noticed at $p < 0.01$ level for loan size with marginal effect coefficient of -1.46×10^{-6} . This means that a unit increase in loan size will have a marginal effect of reducing the probability of borrowing credit from ROSCAs by 1.46×10^{-6} than borrowing credit from family and friends. In practice, ROSCAs give only short term loan and, loan size in ROSCA mostly depends on amount contributed. The result is in line with Kariu, Kin and Balla (2006) cited in Essien (2014) who also reported smaller loan size (negative) for women in informal credit market.

The social capital coefficient was positive for both rotating savings and money lenders and significant at $p < 0.05$ respectively. The marginal effect result for social capital (0.5314) indicates that social capital increases the probability of borrowing from money lenders as a source of borrowing by 0.5314 and also, raises the probability of borrowing from rotating savings and credit association (ROSCA) by 0.0432 at $p < 0.05$ respectively. This means that respondents are more likely to borrow from rotating savings and money lenders than borrowing from family and friends. The positive coefficient of social capital implies that trust among groups increases the probability of borrowing from ROSCA than borrowing from family and friends and also, that membership of an association alone, is not the only factor to consider in borrowing from ROSCA rather, the trust and acquaintance that exist within the group. It shows too, that existence of ROSCA facilitates risk pooling strategies especially, when shocks are idiosyncratic. This result is in line with Essien, Arene and Nweze (2013). The positive coefficient for money lenders implies that, borrowers trust and acquaintance has a direct relationship with the lender. The more the respondent is acquainted with the lender, the greater the chances of borrowing from moneylenders too. Informal lending is usually on trust, and being acquainted with the lender certainly tends to be a trust booster. Kausar (2013), in Parkistan reported a similar result.

The marginal effects of interest rate on borrowing from money lender and rotating savings as shown in table 2 were 4.80×10^{-6} and -0.0000 at $p < 0.01$ and $p < 0.05$ levels respectively, showing a unit increase in the amount paid

on borrowed fund increases the probability of borrowing from money lenders and decreases the probability of borrowing from rotating savings by 4.80×10^{-6} and -0.0000 respectively than borrowing from family and friends. This result means that, farmers are more likely to borrow from money lenders irrespective of interest rate level, than borrowing from family and friends. Balogun and Yusuf (2011) and Banerjee and Duflo (2010) shared similar view that irrespective of higher level of interest rate, households will still borrow credit from money lenders because of their dire need to finance their businesses. Another possible explanation to this might be that, the amount of credit demanded might be significantly large so, it may not be available for borrowing from relatives and friends. The implication of these results are that farmers will prefer borrowing at high interest rate from money lenders and at low or no interest rate from rotating savings than borrowing from family and friends and that interest rate is an important factor to consider in accessing fund from money lenders.

A negative significant ($p < 0.05$) effect on choice of borrowing from money lenders was noticed for asset value with marginal effect coefficient of -0.0000 . This means that a unit increase in the value of assets owned by household head reduces the probability of borrowing from money lenders than borrowing from family and friends. This finding agrees with Turvey et al., (2009). The coefficient of borrowing experience for money lenders was positive and significant at $p < 0.01$. This implies that past loan experience has a direct relationship with borrowing from money lenders while it has an indirect relationship with borrowing from family and friends. This is mainly due to the fact that past loan experience raises the confidence of both the financial institutions as well as the farmers in similar credit transactions. Default risk is lower once a farmer has repaid his previous loans. Similarly farmers identifies with a financier whom they had already dealt with as opposed to a new financier. This finding concurs with Sharon, Dawn and Michael (2002) who reported that the better a relationship is between the borrower and the financial institution the harder it is for a borrower to switch lenders. The relationship is built from past loan experiences. The marginal effect coefficient of borrowing experience in years was statistically significant at $p < 0.05$ and negatively related to probability of choosing to borrow from ROSCAs than borrowing from family and friends. This means that an additional year in borrowing reduces the probability of the farmer to borrow from ROSCAs by 2.01 times. The result implies that as the number of years of borrowing increases, the probability of borrowing from ROSCAs decreases. This could be attributed to the fact that farmers who has been borrowing from ROSCAs tend to diversify or participate in other informal credit sources so as to access more credit.

Repayment period marginal effect coefficient was 0.1136 on borrowing from moneylenders as shown in table 2 and -1.4269 for choice of borrowing from ROSCA at $p < 0.05$ and $p < 0.01$ levels than borrowing from family and friends respectively. This implies that an additional increase in time required to pay back borrowed loan will result to an increase in the use of money lender as a source of borrowing by 0.1136 while an additional increase in time required to pay back borrowed loan from ROSCA will reduce choice of borrowing from ROSCA than borrowing from family and friends. This implies that the longer in months required by the farmer to pay back borrowed loan, the higher will be the choice of using moneylender as source of informal credit. This shows that, respondents preferred flexible and ample repayment period to enable them repay their loans. This finding agrees with Wangui (2013). Furthermore, the coefficient of repayment period for choice of borrowing from ROSCA was negative and statistically significant showed that, choice of borrowing from ROSCA will decrease with increase in repayment period probably because of the short term loan being granted by most ROSCAs. Again participants might prefer to borrow from money lender where the credit given is higher with longer repayment period than borrowing smaller than volume of credit from ROSCA with longer period of repayment.

CONCLUSION AND RECOMMENDATIONS

A number of sources of informal credit are available for the smallholder farmers. A number of socio-economic variables may influence the choice of outlets. A multinomial logit model was adopted to determine the factors that affect choice of major informal credit market used by farmers. The coefficients of each choice (money lenders, rotating savings and credit association (ROSCA) and family and friends) reflects the effect of socio-economic and demographic variables on choice of a particular, major informal credit source (type). The significance of the likelihood ratio chi-square (72.06) at 1% level implied that, the regression had a good fit. The result also showed the set of significant explanatory variables as compared with the reference/base category (family and friends). To augment the interpretation of the estimated results presented in Table 2, the marginal effects (dy/dx) of each variable on the predicted probability of farm households' choice of borrowing sources, evaluated at the means of the explanatory variables were used and also presented in Table 2. The result provided the probability estimation for the likelihood of borrowing from source(s) of informal credit market among farm households with respect to a unit change in the statistically significant explanatory variables: gender, age, education, farm size, loan size, social capital, interest rate, asset value, borrowing experience and repayment period.

The result from the multinomial logit regression showed that most of the explanatory variables affected choice of borrowing from the sources of informal credit market. The model showed that nine of the explanatory variables were statistically significant in determining whether respondents demand/borrow from money lenders while six of the explanatory variables were statistically significant in determining whether respondents demand/borrow from rotating savings and credit association (ROSCA) than borrowing from family and friends. Variables that positively and significantly influenced choice of borrowing from money lenders were education, farm size, interest, borrowing experience and repayment period while gender, age social capital and asset value were negative and significant too. Variables that were negative and statistically significant in determining borrowing from rotating savings and credit associations (ROSCAs) were gender, loan size, interest and borrowing experience while positive and significant variables were age and social capital. However, it is notable that four variables – gender, age, social capital, and interest rate significantly distinguished choice of borrowing from money lender and rotating savings rather than borrowing from family and friends.

Empirical results showed that educated farmers have a higher probability of borrowing from money lenders than from family and friends. It is recommended that the government and non-governmental agencies should redouble efforts to improve education levels in the study area since education enhances people to arrive at more informed decisions about credits. Hence, the need to invest in educational effort especially on evening programmes and adult literacy education which inculcates credit responsibility, accountability as well as efficient management skills. Also, Membership of an association alone, is not the only factor to consider in borrowing from informal credit market rather, the trust and acquaintance that exist within the group which facilitates risk pooling strategies especially, when shocks are idiosyncratic. This will help involvement of borrowers in both operational and policy decisions which constitutes strong participatory elements in management of credit and also, help to unleash the inherent social capital and information advantages for improved informal financing.

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