

Research Application Summary

Socio Economic Factors Affecting Credit Access and Utilization among SACCO Members in Soroti District, Eastern Uganda

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Abstract

This paper examined the socio economic factors influencing credit utilization among borrowers of rural credit schemes in Soroti district, Uganda. The study used a cross-sectional research design involving both qualitative and quantitative research approaches. Two hundred fifty seven (257) respondents were randomly selected from among thirteen SACCOs. Data were collected on the basis of structured questionnaires and in-depth interviews. Qualitative data were manually analyzed by theme and content. Quantitative data were analyzed using the descriptive statistics, t-tests, chi-square test and Logit regression. Results of the t-test indicated that experience in borrowing was significant ($P < 0.05$) and positively related to credit utilization. Results of the Chi-square test indicated that significant factors influencing credit utilization included level of education, main source of income, meeting intended purpose of credit, good planning, saving, and diversification of income sources. Results of the Logit regression indicated that level of education, organization of the farmers, inclusive decision making, farming experience, good planning, diversification of income sources, and source of credit had significant influence on credit utilization.

Keywords: Credit Utilization, SACCO, Soroti, Uganda

Résumé

Cet article examine les facteurs socio-économiques influençant l'utilisation du crédit parmi les emprunteurs des programmes de crédit rural dans le district de Soroti, en Ouganda. L'étude a utilisé un plan de recherche transversal impliquant des approches de recherche qualitative et quantitative. Deux cent cinquante-sept (257) répondants ont été sélectionnés au hasard parmi treize SACCO. Les données ont été collectées à l'aide de questionnaires structurés et d'entrevues approfondies. Les données qualitatives ont été analysées manuellement par thème et contenu. Les données quantitatives ont été analysées en utilisant des statistiques descriptives, des tests t, des tests du chi carré et une régression Logit. Les résultats du test t ont indiqué que l'expérience en matière d'emprunt était significative ($P < 0,05$) et positivement liée à l'utilisation du crédit. Les résultats du test du chi carré ont indiqué que les facteurs significatifs influençant l'utilisation du crédit incluaient le niveau d'éducation, la principale source de revenu, la réalisation de l'objectif prévu du crédit, une bonne planification, l'épargne et la diversification des sources de revenu. Les résultats de la régression Logit ont indiqué que le niveau d'éducation, l'organisation des agriculteurs, la prise de décision inclusive, l'expérience agricole, une bonne planification, la diversification des sources de revenu et la source du crédit avaient une influence significative sur l'utilisation du crédit.

Mots-clés: Utilisation du crédit, SACCO, Soroti, Ouganda

Introduction

Credit is a crucial factor for increased agricultural productivity and for breaking the vicious cycle of poverty of small scale farmers (Shiferaw *et al.*, 2016). About 68% of the world population relies on credit for diverse uses in household, domestic, nation building and rural development (Qureshi *et al.*, 2014). Provision of credit is not useful without its proper utilization. Credit can be utilized for two purpose; for production purposes (income generating activities) and for consumption purpose (for meeting personal needs) (Jain and Parveen, 2014). Developing countries like Uganda provide credit to the poor in the rural areas through microfinance schemes (Peace, 2011; Wale *et al.*, 2013), including Savings and Credit Cooperatives (SACCOs). A savings and credit cooperative also known as a credit union is a cooperative financial institution that is owned and controlled by its members and operated for the purpose of providing credit at low interest rates and providing other financial services to its members (Ikua, 2015). SACCOs are expected to play their share in bringing about broad based development and poverty alleviation (Tsfamariam *et al.*, 2013). SACCOs are registered and regulated under the Co-operative Societies Act; they are accorded the same treatment as producer or marketing cooperatives and to qualify for registration, they are not required to raise any capital. In addition, SACCOs are restricted in terms of where to invest their funds of deposits. Still with these restrictions, SACCOs remain the most important players in provision of financial services and have deeper and extensive outreach than any other type of financial institution (ICA, 2002). They offer(s) a diversity of financial services which include loaning, members' welfare fund, risk management fund, credit facilities, savings facilities and insurance services to a large portion of the population (Momanyi and Njiru, 2016). SACCOs grant loans on the basis of member's savings. The loan may be more or less than the savings of the borrower. Loans less than the member savings are secure and the repayment is secure. Loans in excess of member savings must be guaranteed by other members. Loans that are not recovered are considered to be defaulted. All shares owned by defaulters and any dividend due to them are used to offset the loan, any balance remaining will be deducted from guarantor's share (Keitany, 2013).

In Uganda SACCOs have been viewed as accelerators of development (Kariuki and Rai, 2010). In Uganda SACCOs are seen as an appropriate Microfinance Institutions (MFIs) to serve rural markets which formal financial institutions may not find financially viable. This is because of their simple and cost effective organizational structures and ability to respond to client needs since they are member owned, governed and used. The Uganda Cooperative Societies Statute of 1991 and the Cooperative Societies Regulations 1992 govern SACCOs in Uganda (Kamuhanda, 2010). Despite the popularity of SACCOs as the most appropriate institution to serve rural households and their contribution to poverty alleviation and rural development, SACCOs have been characterized by inadequate credit monitoring and control mechanisms, inefficient loan collection mechanisms and inappropriate loan delivery systems leading to poor loan repayment rates, high loan defaults (Abdi, 2013; Ikua, 2015) and diversion of credit to consumption purposes (Sebhatu, 2012; Muhumuza, 2013; Akerele *et al.* 2014). In Poland, Petrick (2014) explained that due to the fungibility of credit and difficulties in supervising thousands of rural borrowers, funds may be used for consumption rather than productive activities.

In Nigeria a study by Akerele *et al.* (2014) found that 31.7 percent of the members used their business loans for paying school fees, building houses and purchasing vehicles, a situation that greatly affected their repayment.

Proper utilization of loans by SACCO clients can lead to significant impacts on the livelihood of the rural people. To the contrary, if loans are poorly utilized, it is not easy to realize significant impacts of loans (Kwai and Urassa, 2015). Better understanding of credit utilization is expected to lead to improved returns to credit. This study described credit access and determined the socio economic factors influencing credit utilization. among members of Savings and Credit Cooperatives in Soroti district, Uganda.

Materials and Methods

Data used in this study were collected in July and September of 2020, using cross-section survey design based on mixed methods approach. This was deemed suitable for satisfying the goal of obtaining the perceptions regarding credit users, because they are known to be suited with specific time. A sample of 257 SACCO members who had accesses credit facilities were drawn from a sampling frame of 750 members from eleven SACCO situated in Soroti District in Uganda using proportionate random sampling. The SACCOs were selected on the basis of SACCOs giving out agricultural loans to smallholder farmers, which was deemed to be unevenly spread out feature among the study units

Measurement, data collection and data analysis. Qualitative data were collected using focused group discussions involving 125 SACCO members and key informant interviews involving twenty two SACCO staff. The qualitative data were analyzed using content and thematic analysis and Creswell's (2014) six -step model was used to plot the data analysis process.

Qualitative data used were collected using semi structured questionnaire from 257 participants. Quantitative data were analyzed using Statistical Package for Social Scientists (SPSS) for descriptive statistics like means and standard deviation, frequencies and percentages and binary regression analysis was used to determine factors influencing credit utilization.

In this study, access was looked at in terms of sources of credit, experience in borrowing as well as amounts of credit accessed and were analyzed using the descriptive statistics, t-tests, chi-square test. Credit utilization was analyzed using Logit model was used because the dependent variable is binary dummy variable taking a value of 1 for clients who used credit for the intended productive purposes and 0 if credit was used for unintended non-productive purposes. Following from (Gujarati, 1998; Wale *et al.*, 2013; Isitor and Obaniyi, 2014; Tebeje and Regasa, 2015;), the model is specified as below;

$$\ln \left(\frac{P_i}{1-P_i} \right) = A_0 + A_1X_1 + A_2X_2 + \dots + A_nX_n + e_i$$

Where;

P_i = probability of farmers to utilize credit for intended purpose

$1-P_i$ = probability of farmers not utilizing credit for intended purpose

A_0 = intercept

$A_1 (1, 2, \dots, n)$ = regression coefficients

X_i (1, 2...n) = independent variables

And e_i = error term

The variables included in the model (see table below) depended on theory, literature, data availability and bivariate correlation results (see appendices). The bivariate analysis of all the variables included in the model returned correlation coefficients of less than 0.3 indicating minimal multicollinearity between the variables.

Table 1 below shows how the predictors included in the model were operationalized and their hypothesized influence on utilization of credit for the intended productive purposes.

Table 1. Summary Description of the Predictor Variables in the model and their hypothetical signs

Variable	Description (how the variable was defined in the model)	Hypothesized influence
X_1 =Age	Complete year	+
X_2 =Household size	Number of members in household)	+/-
X_3 =Sex	1= Male, 0= Female	+
X_4 =Marital status	1=Married, 0=Otherwise	+
X_5 =Education level	1=Completion of at least primary education 0=Otherwise	+
X_6 = Farming Experience	Years	+
X_7 =Experience in Borrowing	Years	+
X_8 =Inclusive decision making	1=Involvement of household members in credit related decision making 0=Otherwise	+
X_9 = Records keeping	1=Yes, 0=Otherwise	+
X_{10} =Loan amount applied for	Total amount Uganda shillings	+
X_{12} = Credit sources	1= More than one source and 0 for otherwise	+
X_{13} =Credit investment planning	1=Yes, 0=otherwise	+
X_{14} =Saving (Dummy, 1=yes, 0=Otherwise)	1=Yes, 0=otherwise	+
X_{15} =Diversified income sources	1=Yes, 0=Otherwise	+
X_{16} =Mode of borrowing	1=Individual, 0= otherwise)	+
X_{17} =Livestock ownership	1=Yes for cattle, goats and sheep and 0= otherwise	+
X_{18} =Poultry ownership	1= Yes, 0= otherwise)	+

Results and Discussion

Respondents' Socio-Economic and Demographic Characteristics. Majority (75%) of the respondents involved in the study were males. This shows that access to credit from SACCOs is generally dominated by males given the fact that this study targeted randomly selected borrowers from SACCOs in Soroti district. This finding conforms to earlier findings of Anyiro and Oriaku (2011); Ayanda and Ogunsekan (2012) and Okoronkwo *et al.* (2014) who revealed that males were more dominant than females in the access and utilization of credit. Male dominance among the SACCO borrowers is probably attributed to their higher access and control over assets like land that could be used as collateral compared to their female counterparts.

Table 2. Socio-economic and demographic characteristics of respondents

Characteristic	Categories	Statistics (n=257)	
		Percentage	Mean (Standard Deviation)
Sex	Male	75.1	
	Female	24.9	
Marital status	Married	88.3	
	Single	6.2	
	Widowed	3.9	
	Divorced	1.6	
Position in the household	Household Head	82.1	
	Household head's spouse	17.5	
	Daughter to household head	0.4	
Education	None	5.1	
	Primary	40.1	
	Secondary	27.2	
	Post-secondary	27.6	
Most important source of income	Farming	59.6	
	Trading/business	22.9	
	Salaried employment	16.9	
	Casual work	0.6	
Land ownership	Yes	96.5	
	No	3.5	
Livestock ownership	Small ruminants (goats, sheep)	96.6	
	Poultry	91.1	
	Cattle	80.2	
	Pigs	23.8	
Age (years)	Years		44.60(12.11)
Household size	Number of members		8.98 (5.1)
Annual income	Uganda shillings		4,539,455 (5,766, 324)

Over 80% of the respondents were married and were household heads. The average household size for the respondents was about nine people which about double the national average of 4.7 (UBOS, 2014). On one hand this big household size translates into more family members which may enhance production especially for the households engaged in farming. On the other hand, it may translate into higher household level consumption related expenditure which may compromise proper utilization of credit.

About 95% of the respondents had attained some form of form education ranging from primary education (40%), secondary education (27%) and post-secondary education (28%). This indicates that almost all the respondents had the basic writing, reading and numeracy skills to enable them read and understand credit related information as well as keeping basic records for their activities.

The average age of the respondents was about 45 years with the youngest respondent being 20 years old and oldest being 82 years old. On one hand, the minimum age of 20 years indicates that borrowing was exclusively for people aged above 18 years of age since these are legally allowed to make independent decisions and be personally liable for them. On the other hand, the average age indicates that most of the borrowers were generally within the economically active age group and were thus expected to use credit for economically productive ventures.

In terms of income sources, the respondents were diverse with the close to 60% of the respondents depending on agriculture as their most important source of income farming while a further 23% and 17% depended on businesses and salary respectively. Approximately 97%, 91% and 82% of the respondents reared small ruminants (sheep and goats), chicken and cattle. Respondents reported that they largely kept these animals to supplement household nutrition and income.

On average, respondents earned slightly above 4,500,000 million Uganda shillings per year. The high standard deviation (ever higher than the mean itself) indicates that the annual income was highly variable across respondents owing to their diversity in terms of income sources.

Access to credit. Regarding credit access, the study looked at the types of sources of credit from which the respondents had ever accessed credit. Experience in credit access was measured in terms of number of years the respondent had been accessing credit from the different sources. In terms of amount of credit accessed, this study focused on the most recent credit accessed by the respondent in order to reduce errors associated with recall given that most the respondents reportedly never kept any records. The results are presented below.

Sources of credit. Respondents were asked to mention all sources from where they have accessed credit.

Table 3. Results disaggregated according to sex

Source of Credit	Sex of the respondent		Total (n=257)
	Male (n=193)	Female (n=64)	
Village Saving and Lending Associations (VSLA)	74.6	81.3	76.3
Commercial banks	48.7	34.4	45.1
Micro-finance Institution (MFI)	42.0	34.4	40.1
Friends and relatives	10.4	18.8	12.5
Money lenders	7.3	3.1	6.2

Table 3 shows generally shows that both males and females access credit from diverse sources. However, more males tended to access credit from the formal sources (commercial banks and microfinance institutions) while the more females accessed credit from the informal sources (mainly VSLAs). Specifically, the Village Savings and Lending Associations (VSLAs) were the main source of credit for both male and female respondents. Additionally close of 50% and 34% of the male and female respondents respectively had ever accessed credit commercial banks. Similarly, about 42% and 34% male and female respondents respectively had ever accessed credit from microfinance institutions.

Less than 20% and 10% of both males and females had ever accessed credit from friends and money lenders respectively. The diversity of sources from which respondents had reportedly ever accessed credit indicates a generally good level of credit availability and accessibility. This can be attributed to the government's deliberate policy of liberalization of the financial sector that paved way for emergence of different categories of financial service providers in both rural and urban areas.

Experience in credit access and credit amounts received. To further understand credit access in the study area, data were also collected about the length of experience respondents had in borrowing. The study also captured data about the amounts of credit borrowed by the respondents specifically focusing on the most recent borrowing to avoid recall bias. Table 4. presents the results disaggregated according to sex.

Table 4. Experience in credit access and credit amounts received

Statistics	Experience in credit access (years)		Most Credit amount received (UGX)	
	Males	Females	Males	Females
Mean	5.53	4.25	892,979.27	669,375.00
Standard Deviation	4.51	2.77	1,078,944.83	835,817.13
Minimum	1.00	1.00	30,000	30,000
Maximum	20.00	15.00	6,000,000	4,000,000
t-value for difference between means	2.077		1.513	
p-value	0.039		0.131	
Confidence interval for the mean differences	0.066 to 2.500		-67348.34 to 514536.89	

Source: Survey data 2020

In terms of experience in accessing credit, males had accessed credit over a longer period than females. Specifically, the mean experience for males was about six years compared to only four years for females. A statistical comparison of the experience of males and females using an independent samples t-test indicated that indeed the experience of males was significantly higher than the one for females at 5% level of significance.

With regard to credit amounts, males received an average of 890,000 Uganda shillings compared to 670,000 Uganda shillings for the females. The standard deviations corresponding to the credit amounts for both males and females were however high implying high variability of the credit amounts from one respondent to another. Statistically, the credit amounts for males and females were not significantly different.

Utilization of credit by individual borrowers. The main concern here was to establish the activities for which credit borrowed is utilized by the individual borrowers. Survey data and Key Informant interviews revealed multiple responses. Table 5 shows a comparison of how credit was utilized by sex borrower. From Table 5, 56.2 % of the female and 49.7% of male headed households utilized credit for paying school fees and meeting other education requirements. On the other hand, 46.9 % of female and 42.9 % of male headed households utilized credit for expanding and starting small businesses while 35.1% of male and 35.9% of female respondents utilized credit for improving existing farming. This implies that majority of the households view credit as their main source of survival as it can be used as one's initial capital to start up micro-enterprises especially farming and trading. I observed that there were variations in respondents' reasons for borrowing credit. The reasons mentioned by households were hinged on their respective need(s) and at a glance business was one such outstanding reason mentioned. Credit for business is important because they yield daily incomes. This was confirmed from the key informant interviews. A case in point was the manager Soroti Women Cooperative Union who indicated that:

No agricultural loans are disbursed by the SACCO because their returns take long to be earned. The SACCOs give loans to business people only because they are able to earn daily income which enables them repay their loans promptly.

A male borrower explained that, ‘they have managed to open business particularly produce, small Hotel in markets and trading centers and even have bought motorcycles.

Another borrower also indicated that:

Using credit has encouraged agricultural production for crops that have value additions like cassava, sorghum, maize, rice and ground nuts. Through using credit it has given us means of adding value because I have a machine now for crashing cassava and maize.

While another borrower added that:

Many people have used credit for renting land for farming and others have managed to open necessary schools.

The results showed majority of the households had diverted credit for education, enabling them to meet school fees bills for their children and to advance in their level of education which was a major challenge in the study area. For example one borrower explained that, ‘The biggest challenge households have is school fees for their children hence increasing pressure on credit obtained for production purposes’ as explained by one of the board members as follows;

“Loans help when you do not have money. It helps you fulfill the intended plan quickly instead of waiting for returns from the harvest. It can also be used for school fees. For example most of the households have educated their children to higher levels for example from senior one onwards and most people are surviving on loans since they have little money which gives them reason to borrow”s.

Table 5. Utilization of Credit by Sex of Household Head (n= 255)

Mode of utilization of credit	Male (%)	Female (%)
Improving existing farming	22.7	26.2
Buying improved farm equipment	6.6	8.2
Household consumption	8.3	16.4
Expanding/starting business	44.8	42.6
Education	44.8	52.5
Sickness/medical care	1.7	3.3
Construction of house	6.1	4.9

Source:Survey data 2020

Intentions and actual Uses of credit by borrowers. For the accessed credit to contribute to the desired improvements in quality of life and standard of living of its recipients it must be properly used. It is expected that borrowers who use credit properly should invest it for the intended purposes and they should pay it back

without stripping themselves of their productive assets. Therefore in this study, credit utilization was looked at from two perspectives. First by looking at the intended uses for the credit vis-à-vis the actual use to which it was put.

Intended and actual uses of credit. In this study, credit utilization was looked at in terms the relationship between the purpose for which the credit was acquired and what it was eventually used for. In this study, any deviation from the purpose for which credit was acquired was taken as considered to be credit diversion represents improper credit utilization irrespective of the outcomes. In general, about 60% (155 out 257) of the respondents had used the credit for the purposes for which they had acquired it. Therefore, 40% (102 out 257) of the respondents had invested the acquired credit in different ventures from those for which the credit had been acquired. These results therefore suggest that diversion of credit among the respondents was a common occurrence. Table 6 shows the intended uses of the credit acquired and the actual uses to which the credit was put.

Table 6. Intended and actual uses of credit accessed

Activity	Intended use (n=257)	Actual use (n=257)
	Percentage	Percentage
School fees/education	44.0	50.6
Improving the existing crop farming	43.6	33.0
Improve or start business	41.6	43.6
Household consumption	9.7	20.2
Improved tool/farm equipment	6.6	10.9
Construction of my house	5.4	7.4
Sickness/medical care	1.9	4.9

Source: Survey data 2018

Results in the table above show that; respondents acquired credit for use in a variety of ventures including both production and consumption related ones. The common intended ventures for which respondents borrowed were payment of school fees, improving existing crop farming enterprises as well as improving/starting business. Each of these was mentioned by over 40% of the respondents.

Regarding the actual uses to which the acquired credit was put, payment of school fees, starting and/or improving business and improving an existing crop farming enterprise were the common ones. The proportion of respondents who eventually used credit to improve their farming enterprises was about 10% lower than that of those who had such intentions prior at the time of applying for the credit. Conversely, the proportion of respondents who ultimately used credit for household consumption and medical care was more than double that of those who had these intentions at the time of applying for the credit. This comparison of the intended and actual uses of the credit reveals tendencies of respondents diverting credit from originally intended productive ventures to non-productive ones. Diverting credit from originally intended productive purposes to non-productive ventures represents improper credit utilization and it ultimately compromises the positive impact of such credit. Besides compromising the positive impact, credit diversion into non-productive ventures may also lead into credit recipients having difficulties in repaying the credit and consequently losing their productive assets to repay and/or recover the credit.

Socio-economic factors influencing credit Utilization. A binary logistic regression to determine the factors that predict the likelihood of a borrower to use the acquired credit for the intended purpose was run. The results of the analysis are shown in Table 7 below.

Table 7. Results of regression analysis of socio-economic factors influencing credit utilization

Predictors	β	S.E.	Wald	Significance	Odds Ratio (Exp(B))
Age of respondents	-0.011	.014	0.603	.437	0.989
Household size	-0.028	.037	0.563	.453	0.972
Sex	0.232	.388	0.358	.549	1.261
Marital status	0.044	.506	0.008	.931	1.045
Level education	0.857	.315	7.392	0.007	2.355***
Main source	-0.332	.304	1.191	.275	0.718
Sources of credit	-0.729	.323	5.097	.024	0.483**
Mode of borrowing (Individual Vs group)	1.165	.457	6.491	.011	3.206**
Book keeping	-0.403	.338	1.417	.234	0.669
Inclusive decision making	-0.763	.358	4.537	.033	0.466**
Farming experience	1.326	.759	3.054	.081	3.766*
Good planning	1.081	.406	7.104	.008	2.948***
Experience in farming	0.003	.014	0.041	.840	1.003
Loan amount	0.000	.000	0.946	.331	1.000
Diversification of income	0.656	.356	3.398	.065	1.927*
Saving	0.507	.439	1.334	.248	1.659
Livestock Ownership	0.098	.441	0.049	.825	1.103
Poultry ownerships	-0.204	.609	0.112	.738	0.816
Constant	-0.137	.857	0.026	.873	0.872

-2 Log likelihood=310.737^a, Cox and Snell R Square=0.174, Nagelkerke R Square= 0.233,

The result of Logit model analysis is presented in Table 5. The diagnostic statistics (significant Chi-Square value and -2Log Likelihood statistics of 310.737 both indicate good fit of the model.. Though statistically significant, the model only explains approximately 23% of the observed variation in the credit utilization which is acceptable for cross-sectional data (Gujarati et al., 2012) given the complexity and interrelationship of the factors.

Regarding the socio-economic predictors of credit utilization, results in Table above indicate that Out of the 18 variables selected for the model, only six showed significant influence. Specifically, the results show the likelihood of a borrower to utilize credit for the intended productive purpose was dependent on; level of education, number of sources of credit, mode of borrowing, inclusive decision making on issues related to credit, possession of a credit investment plan prior to accessing the credit and number of income sources.

Level of education was significant 1% and positively related to credit utilization. The odd ratio (2.355) corresponding to the education shows that completion of at least primary education level more than doubles the odds of using credit for the intended productive purposes. The possible explanation for this is that education helps the individual to utilize credit as the capacity created would help the individual to analyze, interpret and make use of available information than illiterate individuals. Furthermore, educated borrowers have a tendency to acquire better knowledge in choosing profitable business, better information about the existing investment opportunities and thus are more likely to use loans properly. This finding is in agreement with findings of Ibrahim and Zareba (2015), Wale *et al.* (2013) and Orebiyi *et al.* (2012) who their study found a positive and significant relationship between education and credit utilization.

Mode of borrowing also had a positive and significant influence on credit access at 5%. Specifically borrowers who had accessed credit as individuals were more likely to properly utilize credit. The odds ratio of 3.206 show that the odds of a borrower who had accessed credit as an individual to use credit for the intended productive purpose were slightly more than three times higher than those of his/her counterparts who had accessed credit as groups. The implication is that borrowing as an individual accords the borrower more powers over what to use the credit for compared to when the credit is advanced to the group. Furthermore, obtaining credit as an individual implies that the borrower is individually liable in case the credit is misused compared to accessing the loan as a group where there is collective liability. This finding is consistent with Ibrahim and Zareba (2015) who found that the more collateral of group lending is used, the more likelihood that the borrowers' use of loan in investment activity decreases. This result signals potential adverse implications of lending to groups despite the its numerous benefits related to fast and cost-effective mobilization and follow up of clients and addressing barriers to access such as high transaction costs and collateral. Therefore lenders who may wish to work with borrowers organized in groups should explore strategies of dealing with their adverse impacts on credit utilization. A possible strategy may involve lenders targeting groups as platforms for mobilizing and following up on clients but then lending to individual group members rather than to the group.

Inclusive decision making indicated by involving household members in decisions related to credit acquisition and use had a negative relationship with credit utilization. The influence was statistically significant at 5%. The odds ratio of 0.466 corresponding to inclusive decision making indicate that when a borrower engages other household members in decisions related to credit, his/her odds of using credit for the intended purpose reduce by about half. This finding agrees with the finding of Beekman *et al.* (2015) who in their study asserted that dense family networks have adverse impacts on economic decisions. The likely explanation for this is that engagement of household members in decision making about credit offers the household members an opportunity to influence the borrower to respond to household consumption needs at the expense of his/her original intentions. This is especially possible in cases where the borrower is a woman and is culturally bound to respect her husband's suggestions/demands. For instance, during a focus group discussion with members of Together We can SACCO in Moruapesur village, one participant shared the following experience;

"I know of a woman who received a loan and she consulted her husband about what to use the money for. The husband convinced her to invest the money into a joint rice project but when the rice was harvested the husband took control over the whole produce leaving the woman to suffer alone with the repayment of the credit. (FGD in Moruapesur village, 28th January 2015)"

Whereas the empirical evidence and the above experience indicates the adverse implications of involving household members in decisions about credit, borrowers and key informants from credit institutions involved in the study overwhelmingly advocated for the need for prospective borrowers to engage household members throughout the entire credit acquisition and utilization process. They reported that most of the borrowers who had engaged their household members in the planning for and utilizing were able to smoothly acquire collateral as well family members labour and financial contribution to ensure that the household optimally benefits from the credit received. In fact, four of the 11 SACCOs covered by this study, required prospective borrowers to show proof of consultations with household members before their application for credit could be handled. Therefore this apparent contradiction between the empirical evidence and reports from borrowers and key informants from the SACCOs seem to indicate that the influence of engaging household members in credit related decisions context specific mainly shaped by the pre-existing household level working relationships among household members. Therefore, the choice on whether a borrower should involve their household members in decisions about the credit should be based on a thorough understanding of the dynamics in each household.

Experience in farming was significant at 10% and positively related to credit utilization. The odds ratio of 3.766 corresponding to experience in farming indicates that an increase of one year in the borrower's farming experience increases the odds of using credit for the intended purposes by close to four times. This implies that the more years farmers spend in farming the more knowledge they gain in utilizing credit. This finding corroborates with findings of Orebiyi *et al.* (2012) who found a positive and significant relationship between farming experience and credit utilization. However, this finding disagrees with Okoronkwo *et al.* (2014) who in their study found no significant relationship between years put in farming and utilization of micro-lending scheme and further asserted that utilization of micro-lending scheme significantly influences productivity and expansion among rural farmers.

Having a credit investment plan prior to accessing credit had a positive and significant relationship with credit utilization. The relationship was significant at 1%. The odds ratio of 2.948 corresponding to having a credit investment plan imply that borrowers who had investment plans prior to accessing credit had about three times higher odds to use the credit for the intended purpose compared to those without such an investment plan. The possible explanation for this is that having investment plans before accessing credit represents a form of personal commitment of the borrower to the intended purpose and this possibly forces him/her to desist from diverting the credit to other unintended non-productive ventures. This finding disagrees with Birech (2014) who found a negative relationship between investment plan and credit utilization.

Diversification of income sources was significant at 10% and positively related to credit utilization. Specifically, the odds ratio associated with diversification of income sources show that borrowers who had more than one income source had about two times higher odds of using the credit for the intended productive ventures compared to those who had only one income source. The possible explanation is that borrowers with multiple income sources have multiple revenue streams to cater for other unintended productive and non-productive expenditures to which the credit would otherwise be diverted. This finding is in agreement with (Tebeje *et al.*, 2015) who also observed a positive and significant relationship between diversified sources of income and credit utilization.

Furthermore, source of credit was significant at 5% and negatively related to credit utilization. The odds ratio of 0.483 associated with credit source indicate that accessing credit from more than one source reduced the odds of using credit for the intended purpose by about half. Conversely reducing this factor will enhance household's decisions to utilize credit. The possible explanation for this would be that accessing credit from multiple sources may be an indicator of financial distress on the side of borrower which in turn translates into diversion of the credit. This finding is in disagreement with the findings of (Isitor *et al.*, 2014) who in their study indicated a significant and positive relationship between awareness of credit source and credit utilization.

Conclusions and Recommendations

This study argues that socio economic factors such as individual borrowing, inclusive decision making, diversification of income sources and experience in farming play a key influence on level of credit utilization. As such enhancing these factors would improve credit utilization in the study area. Based on these findings the study recommends the following:

1. Credit institutions should involve family members in the access and utilization of credit to address the problem of credit diversion through the use of family monitoring.
2. Diversified income sources should be included in the institutions policies as a prerequisite for households to access credit so as to increase effective utilization of credit.
3. Individual borrowing should be encouraged so as to increase credit amounts disbursed to borrower households.
4. Experience in farming should be a way of capturing the credit history of borrower households so as to improve credit utilization in rural areas.

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