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REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESIS (ES)

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RESULTS & DISCUSSION

FINDINGS

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APPENDIX/ANNEXURE

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ASSESSING THE EFFECTIVENESS OF GROUP BASED BORROWING OF OROMIYA CREDIT AND SAVING SHARE COMPANY, JIMMA ZONE, ETHIOPIA

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ABSTRACT
This study has focused particularly on assessing the effectiveness of group lending on Oromiya Credit and Saving Share Company (OCSSCO) of Jimma Zone Ethiopia. Primary data were collected from 252 group based borrowers. With the help of Logit model the study found that educational level, business type, land size, other source of credit social ties, number of the group, screening the group before the formation, internal rule and conduct, credit officer visit the group, distance and family size were positive and statistically significant. While, the age of the group member, gender of the group member, visiting each other and training are positive and insignificant. The study recommended that the OCSSCO of Jimma zone should give attention on distance between the group members, the period of training, educational level of the borrower, experience and credit officer visit/pressure to make the group lending effective and to have impacts on profitability.

KEYWORDS
group based borrowers, loan repayment, logit model.

INTRODUCTION
Microfinance is the supply of loans, savings, money transfers, insurance, and other financial services to low-income people. Microfinance institutions (MFIs) encompass a wide range of providers that vary in legal structure, mission, and methodology offer these financial services to clients who do not have access to mainstream banks or other formal financial service providers (Lafourcade *et.al* 2005). Microfinance institutions (MFIs) grant collateral-free loans (group lending) to poor entrepreneurs whose income originates mostly from informal economic activities. As a consequence, MFIs are often committed to rely on soft information to assess their borrowers' creditworthiness (Bernheim *et.al* 2012).

Beginning in the mid-seventies, savings and credit institutions started extending small loans to groups of poor women in the villages in order to empower them to invest in micro level businesses. This form of micro-enterprise credit is based on solidarity based group lending where every group member is tasked to ensure the repayment of all members (Chakravarty *et.al* 2010). Microcredit is one of the financial services which include the act of providing loans of small amounts to the poor and other borrowers that have been ignored by commercial banks. Under this definition, microcredit encompasses all lenders, including the formal participants such as specialized credit cooperatives set up by governments to encourage economic development and those of a more informal variety like the village moneylenders or even loan sharks.

In some countries where poverty levels are high and financial services do not reach to the vast majority of the poor. Microcredit is important in encouraging entrepreneurial activity and alleviating poverty. However, microcredit can only be effective if it is carefully used to ensure that both the lender and the borrower acquire the maximum possible gain. Group lending has been used successfully in some parts of the world to expand the reach of microcredit programs that is notably by the Grameen Bank (Kodongo *et.al* 2013).

Group lending provides a loan to an individual borrower, who is a member of a borrowing group. The groups of borrowers are made responsible for the repayment of the loan of the individual group member. Non-repayment by the group means that all borrowers in the group will be without future access to loans from the program. In this way, group lending creates incentives for individual group members to select the other members of the group to enforce repayment, because each individual wants to reduce the risk to ensure the access for future loans. Group lending structure is more effective in providing group lending than the lender, because group members usually live close to each other and has high social ties. Group lending structure motivates screening, monitoring and enforcement within the group, to improves the effectiveness of group lending due to the fact that the group members live in the same area and socially tied, repayment of group loans will be higher(Lehener, 2009).

Since the establishment of the Grameen Bank in Bangladesh in 1976, the practice of group lending has been widely adopted in microfinance programs in developing countries as an important tool to provide credit to the poor. In group lending (or joint liability) a loan is granted to a group of borrowers and the whole group is liable for the debt of any individual member in the group. This practice allows microfinance programs to mainly rely on accountability and mutual trust among group members rather than financial collateral to insure against default. Given that the poor often do not have appropriate financial collateral to offer, group lending programs offer a feasible and even profitable channel to extend credit to the poor, who are usually kept out of traditional banking systems (Li *et.al* 2009).

Lending is a risky enterprise because repayment of loans can seldom be fully guaranteed. For this reason, lenders devise varies institutional mechanisms aimed at reducing the risk of loan default like pledging of collateral, third party credit guarantee, use of credit rating and collection agencies, group lending and etc.(Sharma and Zeller, 1996).

The effectiveness of microcredit as a tool to combat poverty is much debated now that after years of rapid growth microfinance institutions (MFIs) in various countries - including India, Bosnia and Herzegovina, and Nicaragua are struggling with client over indebtedness, repayment problems, and in some cases a political backlash against the microfinance sector as a whole (Attanasio *et.al,* 2011).

Repayment of loans is an important measure for the success of group lending programs. In the long run, programs may only survive if groups repay the loans they receive. When borrowers form groups and are held liable for each other, lending to the poor can be profitable even if borrowers do not possess any collateral and lack a credit history (Lehener, 2009). The difficulty to reach the financial sources is one of the main obstacles to an increased involvement of the poor borrowers to the economic development. This layer of the population is ineligible to the classic banking sector because of lack of collateral permitting the covering of the value of the loan in case of repayment problems. Microfinance emerged as an economic development approach oriented toward households of weak income. Instead of bestowing some individual micro credits, MFI in developing countries prefer to lend to groups of people that are jointly responsible for the repayment of the received loan (Bassem, 2008). One important reason why the methodology of group lending with joint liability is popular among MFIs is that it forces group borrowers to use their social ties in order to screen, monitor and enforce loan repayment on their peers (Postelnicu, 2012).

Like other in developing areas of the world, people in Ethiopia are living under poverty. MFI play an important role in mobilizing financial resources for micro enterprise by extending credit to various business and individuals (member of group). Lending represents the heart of the MFI and loans are the dominant assets as they generate the largest share of operating income. However, loan exposes the institution to the risk. The past studies in Ethiopia on microfinance institution focused on determinants of access to credit and loan amount on household level evidence from urban Ethiopia. However, if any development effort is to bring about improvement in the microfinance institution group lending, making the group benefited from increased production, consumption, education and health. The impacts of group lending on repayment performance should be answered so that appropriate interventions can be made. However, this study examined on different problems associated with that reduces the effectiveness of group lending and its impact on profitability of microfinance institutions. Hence the main objective of this study was to examine and assess the effectiveness of group lending in OCSSC of Jimma zone, Ethiopia. Specifically: identify factors that affect the effectiveness of group lending and; assess the loan repayment performance of the group.

EMPIRICAL LITERATURE

Many studies have been conducted in both developed and developing countries to identify the factor that affect the effectiveness of group lending. Based on the time constraint and the number of empirical literature available on the related area of this research it was quite difficult to present the results of all researches. Therefore, the empirical studies in this study on the effectiveness of group lending and factors affecting loan repayment performance of borrowers focus on those that have been conducted after 1976's.

Sharma and Zeller (1996) use data of 128 groups from four group-based lending programs in Bangladesh to study the determinants of loan repayment. They use a number of variables that may measure screening, monitoring and enforcement activities within groups. Their results show the following; First, the repayment problems increase when there are more relatives in the same group. This help their hypothesis that screening, monitoring and enforcement among relatives does not take place or at least is less effective, since relatives may more easily collude against the program and delay repayment. Second, if borrowers are more credit rationed this increases repayment performance. Their result can be taken as evidence for the fact that group members have more motivations to screen, monitor and enforce if they have no other credit sources. Third, groups that were formed using a self-selection process show good repayment ability.

Bassem (2008) discussed with the use of a Logit model, the internal and external delinquency of a self-designed survey of 208 groups of credit. His result of estimation shows that the repayment is influenced positively by the internal rule of conduct, the same business, the knowledge of the members before formation of the group, peer pressure, the self- selection, sex, the educational level and the non-financial services. In contrast to this the homogeneity and the marital status are among the main factors acting negatively on the repayment performance which can determine the effectiveness of the group lending and its impact on profitability of the microfinance institutions.

In support to Bassem (2008) stated that based on the successes of Grameen Bank showed that, there is possibility to provide money to a number of low income people with financial services by using a group methodology. In their study peer pressure and group solidarity are used as instrument to gain high repayments. As well as urban, homogenous group, good leadership and training and history in groups had the more probability of loan repayment. Besides to these the credit terms, creating inherent (matching problem) as group lending is repeated over time reduces the repayment of loan. All variables that have a positive and negative impact on loan repayment performance have their own impact on effectiveness or in effectiveness of group lending directly or indirectly. To measure the relevance of positive and negative, the researchers accomplish a survey of 140 groups in Bangladish.

Hermes *et.al* (2003) by using data from an extensive questionnaire held in Eritrea among participants of 102 groups they showed that the social ties of the group leader do have a positive effect on repayment performance of the groups. In opposite to it is not true for social ties of other group members. As well as they suggested that the two ways on the issues addressed in their paper. The First way is the methodology proposed, separately look at the group leader and other group members when it comes to monitoring and enforcement activities should also be applied for other programs in other countries to generalize the results of the study. Second way is the theoretical as well as empirical studies could verify whether the delegated monitoring model is superior not terms of reducing repayment problems as compared to other group based lending practices. From this study there are different variables that have impacts on the effectiveness of the group lending and its impact in many ways. The variables that used by him are the same to the other researchers. Among them, length of time for loan, rate of interest number of members and etc. with the help of Logit model to analyze his results.

Abafita (2003) conducted a study at OCSSCO Kuyu Woreda of North Showa of Oromiya with the aim of analyzing the factors that influence borrowers loan repayment performance, evaluating the loan rationing mechanism and also assessing the impact of program on the living standard of borrowers by the help of primary data through structured questionnaire. In his study estimation results of the descriptive statistics and the Probit model show that the variables such as education, income, loan supervision, suitability of repayment period, availability of other credit sources and livestock are important and significant factors that increases the loan repayment performance, but loan diversion and loan size are assessed as the factors that decreases the loan repayment performance.

Okurut *et.al* (2009) investigated on the key factors influence loan repayment performance among group clients of microfinance institutions (MFIs) in Tanzania. The study was based on a sample of 150 respondents in Kariakoo division of Dar salaam, Tanzania. In their study the Logit model was used. The regression model results showed that experience, training time and sanctions have positive and significant effects on loan repayment performance among group clients of MFIs. This is the sign of the effectiveness of group lending and it has effect on profitability. In opposite to this the study shows that transaction cost and group size have negative and significant effect on loan repayment performance. This negativity of the two variables contributes to the default of the group which has its own effect on the effectiveness of group lending and its impact on profitability.

Godquin (2004) discussed his result by the help of Probit model. Microfinance programs are a key element of poverty alleviation strategy through different lending methodologies such as group lending, nonfinancial services and dynamic incentives as means to alleviate poverty. In this the explanatory power of theoretical model that attribute the performance of MFIs in terms of repayment to the use of such financial innovations has tested. The result described that group homogeneity and the age of the group have a negative impact on the repayment performance that determine the success of group lending. That is at this time the groups become ineffective and negatively affect the profitability of the group lending.

METHODOLOGY

This study was made by using of primary data. The primary data to be generated included characteristics of borrowers, loan size, age of borrowers, marital status of the users, and etc. The study used instruments as self-administered questionnaires and semi-structured interviews to collect primary data from the respondents and hence this study has sampled 256 group borrowers. A two stages sampling technique had been used to draw sample from the population. In the first stage, four Woredas was randomly selected among 16 Woredas among the Woredas that OCSSCO has a branch within the zone. In the second stage, 256 group borrowers had been randomly drawn from each of the four Woredas these Woredas are Karsa, Mana, Sakka cokorsa and Gomma Woreda. To determine sample size we used the following formula, by assuming that Δ =0.5. That is in the absence of specific information about Δ or σ effect size of δ could be 0.5 that is the medium one to survey sampling determination.

$n = \frac{16}{\Delta^2}$ Or $n = \frac{16}{\delta/\sigma}$(Allen Jr 2011).

Where n = the sample size and

Δ = variance

Therefore, $n = \frac{16}{0.5^2} = \frac{16}{0.25} = 64$

Based on the above description and result, we multiplied the result by number of the Woredas randomly selected. So the result is 64*4=256.

ECONOMETRIC MODEL

In the analysis of binary response, Logit model is a parametric lead practice. Many researchers apply the Logit model routinely to analyze binary data. Maddala 1987 states that for the analysis of the fixed effects model, the Logit model is the appropriate one. The reason of choosing of Logit in the fixed effects cannot be justified by anything but convenience. Also Amemiya 1985 identify a major justification for the Logit model is that the logistic distribution function is similar to the normal distribution function but has a simpler form. In the Logit model the errors are assumed that the standard logistic. The Logit model used in order to avoid the problem encountered by Ordinary Least Square (OLS) model such as, the marginal effects are linear in parameters, there is heterocedasticity, OLS might predict values below zero and above one (Truglia, 2008). Based on the above advantage and other specification we used the Logit model.

$$F\,(z_1) = \frac{\exp(z_t)}{1+\exp(z_t)} \qquad [1]$$

Hence;

$$log\,\frac{F(z_t)}{1-F(z_t)} = z_t \qquad [2]$$

Note that for the Logit model

$$log\,\frac{p_1}{1-p_t} = \beta_0 + \sum_{j=i}^{k} \beta_j\, x_{ij} \qquad [3]$$

The left hand side of this equation is called the log-odds ratio. Thus the log- odds ratio is a linear function of the explanatory variables. So the study has been conducted by using the Logit model that has a regression model of

$$y \;=\; \sum_{j=1}^{k} \beta j x i j + \mu \qquad [4]$$

Where “y” is dependent variables,
“xij” is explanatory variables and
“µ” is error term.

In this, what had been observed is a dummy variable “y” defined by:

$$\begin{cases} y = 1 \text{ if } y > 0 \text{ and} \\ y = 0 \text{ if otherwise} \end{cases}$$

DEFINITION OF VARIABLES AND WORKING HYPOTHESIS

TABLE 1: DESCRIPTION OF VARIABLES AND MEASUREMENT

Variables	Type	Measurement	Variable label
Ag	continuous	year	Age of the respondents
Educ	continuous	year of education	Education level of the respondents
Las	continuous	local measurement[1]	Land size
OTSC	Dummy	yes=1, no=0	Other source of credit
Kmbegif	Dummy	yes=1, no=0	Knowing members before group is formed
Numgroup	continuous	number	Number of the group (group size)
Gen	Dummy	yes=male, no=female	Gender of the borrower
Sgmbtf	Dummy	yes=1, no=0	Screening the group
Rulecond	Dummy	yes=1, no=0	Internal rule and conduct
Viseot	Dummy	yes=1, no=0	Visiting each other (peer pressure)
Crovgr	Dummy	yes=1, no=0	Credit officer visit
Dis	continuous	distance/ km	Distance from credit source
Training	continuous	number	Training given by the institution
Familysize	continuous	number	Number of the member of the household

Other source of borrowing: Groups with more outside borrowing opportunities will have access to higher loan size giving group members greater incentive for risky projects. However, outside credit options can also be signals of credit quality, sound economic conditions in the area, etc. The expected sign on outside credit options would therefore be ambiguous.

Age: At younger age, people are likely to be at career stages where higher future incomes are expected. It may also be argued that the growth rate of income increases in the early stage of the earning life cycle but then declines, as one gets older. On the other side, at older age a borrower may acquire stability, may gain a lot of experience in running a business or may feel a sense of more responsibility hence could be positively related to loan recovery. Therefore, it will be difficult to hypothesis the sign.

Education: the educational background of the group ranges from illiterate to tertiary. It is assumed that as the lender gets educated, they could acquire more knowledge so that their efficiency in allocation of resources increases and so does the proper utilization of the loan. Their ability to adopt themselves to changing situation would be better than the illiterate ones; hence it would have positive relation with effectiveness of group lending and its impact on profitability.

Sex: Most studies attach positive sign to females in relation to repayment that show the effectiveness of group lending arguing that female borrowers feel more responsibility to their families than male counterparts. In opposite to this we hypothesized that lending to male is effective and has positive impact on loan repayment performance.

Training: Training may avoid problems from emerging and may teaching groups to develop a stronger intergroup contract, leading to better group lending effectiveness. The program may train groups very effectively so that they learn how to create a system of contingent contracts to obtain or cover the repayment of an individual experiencing problem which is the indicator of the effectiveness of group. Therefore, training may have positive sign on the effectiveness of group borrowers.

Screening: The variable screening is a dichotomous variable that equals “1” if the group has screen the group to reject a person who wanted to join and “0”otherwise. The variables screen is meant to measure the ability of group members to exclude members from joining the group. These variables contain information about group members at the moment the group is being formed. This may have a positive relationship with the effectiveness of group lending and its impact on profitability.

Peer pressure: Peer pressure measures the group members’ willingness to influence the in effective partners (groups). Peer pressure may have positive sign on the effectiveness of group lending.

Social ties: reflect the degree of homogeneity/connectivity among the group members. Based on this the social ties may have positive sign on the effectiveness of the group and its loan repayment performance of the individual borrowers.

Family size: if the group member has large household size, a considerable amount of income from the project could be diverted away from the intended purpose of the project, which may be the sign of loan diversion and hence would results unable to pay back their loan. Therefore, the sign is expected to be negative.

Loan Diversion: If the borrower diverted to more productive use than the intended project, then it will have a positive impact. However, the borrower (group member) diverted it to unviable projects it will have a negative impact. Thus it all depends on their performance of the project the loan is diverted to. Therefore, the sign of the variable can’t be predetermined.

Group size: to identify that the size of the group does have influence on the effectiveness of the group lending and its impact on profitability.

[1] In the local areas land is measured by “ttimad”

Internal rule and conduct: it identifies the effect of rule and conduct on the effectiveness of group lending and its impact on profitability. The researcher assumed that it has positive impact on the effectiveness of group lending and its impact on profitability.

RESULTS

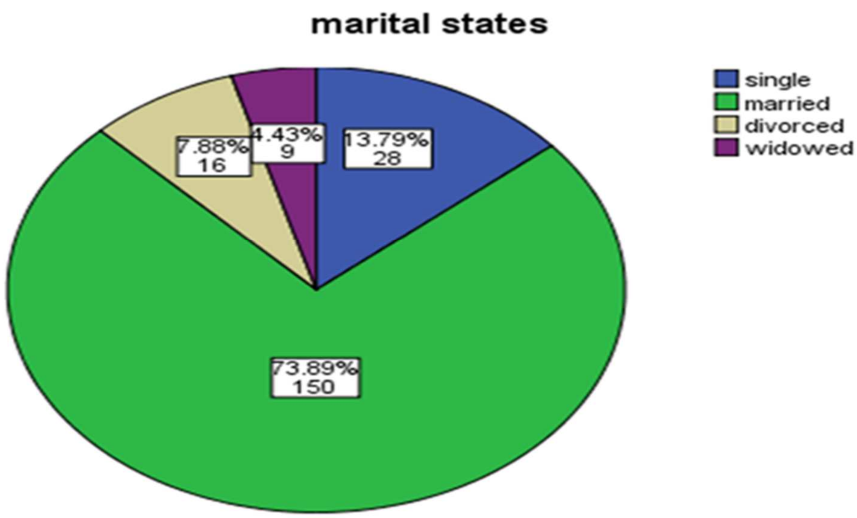
From the total 252 questionnaires intended to be collected from OCSSCO group based borrower, only 203 (81% response rate) questionnaires were effectively collected and analyzed. The selected sample size of this study was 252 OCSSCO group based borrower for whom questionnaire distributed and interviewed. Out of these, 203 from group based borrower were returned the questionnaires. The information obtained from document analyses used as a complementary data for analysis.

TABLE 2: RESPONDENTS TAKEN PROPORTIONALLY FROM WOREDA

OCCSCO group based borrower Sample woreda	Sample size	Percentage (%)	Number of respondents who provide their reply	Percentage (%)
Kersa wereda	64	25	50	24.60
Seka chokorsa woreda	64	25	47	23.50
Mana woreda	64	25	52	25.60
Gomma woreda	64	25	54	26.60
Total	256	100	203	100

Source: Survey of (2014)

FIGURE 1: THE MARITAL STATES OF THE RESPONDENT



Source: survey of (2014)

The marital status of the responding group members shows that 150 (73.9 %) of the respondents were married. While the rest of the respondents are; single, divorced and widowed with the count of 28 (13.8 %), 16 (7.9%) and 9 (4.4%) respectively. The groups that are formed with the married group member are influential on the effectiveness of group lending than the other group formed that is single, divorced and widowed. This is because the married people are worry and think for their family future life.

For the empirical analysis of this study, binary Logestic regression method was used to come up with the econometric results. For the test statistics 10% significant level is used to reject or not to reject the null hypothesis. The first test used in this study was Hosmer and Lemeshow model fitness test because they are the means to know whether the model is valid or not to continue with the regression. Accordingly, Omnibus tests of model coefficients and collinearity test were tested and the results are presented at the appendixes part. As these tests prove the validity of the model, the study had continued into regression analysis and hypothesis testing. Logistic regression was used to investigate the effectiveness of group lending among the OCSSCO borrowers. The maximum likelihood estimation technique was used. Tables 3 present the results of the logistic model for OCSSCO borrowers.

The result (Table 3) shows that predicted influencing factors were statistically significant at (Chi-Square = 175.838, P-Value = 0.000, 89 degrees of freedom, Nagelkerke R Square (R) = 0.774 and Cox and Snell R Square (R^2) = 0.579). The estimated coefficients were statistically different from zero variously at the 1%, 5% and 10% levels of significance. Overall, the logistic model successfully predicted factors contributing to the effectiveness of the group lending.

Correlation is a way to which two or more variables are associated with or related to each other. The inter correlation between the two variables can be measured by the partial correlation coefficient between one variable with another variable. As a rule of thumb, if the correlation coefficient between the two variables is greater than 0.8, one can conclude that there is a series problem of multicollinearity. Accordingly the test result shows that the correlation coefficient between all variables under consideration is less than 0.8 implying that the explanatory variables can separately contribute to the variation in the dependent variable.

TABLE 3: LOGIT ESTIMATE FOR THE EFFECTIVENESS OF GROUP LENDING AND ITS IMPACT ON PROFITABILITY

								90.0 CI for Exp(B)	
		B	S.E	Wald	Df	Sign.	Exp(B)	Lower	Upper
Step1[a]	Ag	.342	.616	.307	1	.579	1.407	.511	3.878
	Educ	-.661	.387	2.915	1	.088***	.517	.273	.976
	Busty(1)			15.387	3	.002*			
	LaS	.586	.328	3.187	1	.074***	1.797	1.047	3.082
	OTSC(1)	-4.019	1.634	6.051	1	.014**	.018	.001	.264
	Kmbgif(s.ties)			6.696	2	.035**			
	Numgroup			12.612	2	.002*			
	Gen(1)			3.667	2	.160			
	sgmbtf(1)	6.620	2.737	5.851	1	.016**	750.221	8.317	6.767E4
	rulecond(1)	10.842	3.859	7.891	1	.005*	5.111E4	89.434	2.921E7
	viseot(1)	40.944	2.502E4	.000	1	.999	6.048E17	.000	.
	Crovgr(1)	-8.165	4.707	3.008	1	.083***	.000	.000	.656
	dis(1)	-3.670	1.169	9.848	1	.002*	.025	.004	.174
	training(1)	-2.421	4.019E4	.000	1	1.000	.089	.000	.
	Familysize			13.572	3	.004*			
	Constant	4.407	1.063E5	.000	1	.457	82.035		

Source: Own computation from collected data (2014)

*, **, and ***, significant at significance level of 1%, 5% and 10% respectively.

Chi-Square = 175.838, P-Value = 0.000, df = 89 Nagelkerke R Square = 0 .774 Cox & Snell R Square = 0 .579 and -2 Log likelihood =104.155[a]

Educational level (Educ): The variable educational level of the respondents is positive and statistically significant at 10%. This show that, highly educated borrowers are 0.623 times better to repay their loan than when the group member is none educated (illiterates). This is because of the educated group member can manage their expenses and their business activities than illiterate group members. These play a great role on the effectiveness of group lending and its impact on profitability of the group. In line with this finding, Bassem (2008) showed that the more educated borrowers are supposed to have the necessary facilities to select the profitable projects and to manage them appropriately thereafter.

Group Size /Number of member of the group (Numgroup): The variable group size /member of group have positive and significant influence on the effectiveness of the group lending at 1%. This result implied that large number of member of the group is more likely repay their loan than those which have less number of group member. The impact of many members of group size /number of group on the effectiveness group lending are 0.002 times than those of less group size. On the contrary by the study of Okurut *et.al* (2009) the group size variable , which was measured by the number of people that form a particular group was found to have a negative and significant effect (at 5%) on loan repayment performance.

Screening (sgmbtf): Screening the group before the group is formed has a positive and significant influence on effectiveness of group lending at 5 % level of significance. This implied that the effectiveness of group lending is higher when the group member screen the group before formation than the group did not screen the group member. This help the group member to identify the behavior of the group member, who is hard worker and not and who worry about their credit. Because the group member who differentiated through this struggle for their group effectiveness. These show that the screening and effectiveness of group lending are directly related to each other. The influence of screening the member of the group before the formation is 2.017 times higher than the groups did not held on the screening of group members before the formation.

Social ties (kmbgif): Results on the effect of social ties on repayment are in line with (Zeller, 1998). Information contained in socially tied groups and group members' sensitivity to their social network both lessen the consequences of adverse selection and moral hazard problems which improve repayment performance that increase the effectiveness of group lending. This variable has a positive and significant influence on the effectiveness of group lending at 5 % level of significance.

Other source of credit (OTSC): This variable has positive and significant influence on group lending and its impact on profitability at 5 % level of significance. This show that as other source of credit decrease the effectiveness of group lending is increased. This is the same result (positive) as hypothesized before. Other sources of credit influence the effectiveness of group lending and its impact on profitability by 0.018 times than if there is no other source of credit to group based lending.

Family size (Familysize): Family size is positive and statistically significant at 1% level of significance. From the logistic regression result, it can be concluded that family size can influence the effectiveness of group lending positively and significantly. This implies that those borrowers with large family size have the advantage to use cheap labor cost of production and hence easily produce agricultural products. This result also confirms the same.

Internal rule and conduct (rulecond): the effectiveness of group lending is high when the group has internal rule and conduct than when the group did not have it. It indicates that as the internal rule and conduct strengthened the effectiveness of group lending by 10.842 units. Internal rule and conduct imposes the effectiveness of the group lending by 5.111 times than those groups with no internal rule and conducts.

Land size (Las): In this study the land owned by group members was 0.5 hectare at a minimum and 8 hectares at a maximum. The logistic model shows that land size variable has positive and significant 10%. The high land size owned by group borrower has positive impact on loan repayment performance than when the group borrower has less land size.

Business type (Busty): The business type variable was positive and significant at the 5% level of significance. This implied that the borrowers involved in agriculture, such as coffee plantation and animal fattening have impact on effectiveness of group lending. Also Bassem (2008) in his finding he puts the fact one cannot decide on an exact sign of the business type.

Credit officer visit/staff pressure (crovgr): Credit officer visit is the visit that the credit officer /staff held to look the business activities of the group borrowed the money from the institution (OCSSCO). The effectiveness of group lending is negatively related to the credit officer visit/staff pressure. The result is more of contradictory. This may be because the group members only think about their loan repayment only, not about the profitability of the group and they worried daily he/she would come today or tomorrow and the like.

Distance (dis): The main distance between the group members is 0.5 km at the minimum to 6 km at maximum on average at the rural area and 0.02 km at minimum and 1.5 km at maximum in average at urban area. The distance is taken approximately as the respondents' replied in this study. This variable had a negative and significant influence on the effectiveness of group lending. The effectiveness of group lending is higher when the distance between the members is less than as compared to it is longer.

CONCLUSIONS

With regard to credit default as an effectiveness of group lending measure for the study, Educational level, Business type, Land size, Other source of credit, Social ties, Number of group/group size, internal Rules and conduct, Credit officer visit/pressure, Distance and family size variables have a positive and significant impact on the effectiveness of group lending. Against the hypothesis one the regression analysis result indicated that female borrowers are effective. This means that females are more effective in group lending than male counter parts. Also the family size had a sign against the hypothesized at the regression analysis result. This means that as the family size increase the effectiveness of group lending can increase. This show that as the group members strives for the survival of his/her family life he/she also contributes for the effectiveness of group lending. In opposite to the above explanatory variables the variables such as Age, Gender, Visiting each other/peer pressure and training have positive sign but insignificant influence on the effectiveness of group lending.

RECOMMENDATIONS

OCSSCO should give attention to the group member that are formed from educated people because the group can understand the training given to them to manage their credit, pay their credit and can save the money they got. It is also essential that the prospective microcredit clients (group lending) should given training prior to being entrusted with loans for a long period of time that enables the members to manage their credit, save and repay their credit.

The group members recruited into the credit program should have adequate business experience in their Kebeles or villages in some group based activities such as Kebele administration, Idir Iqub and the like to run viable business. The members of group formation into the credit program should be formed without the initiation of credit officer. This does not mean that the credit officer totally held in the initiation of the group formation, even if the credit officer take part in the initiation in few, the credit officer should save themselves from initiation to form the group. The OCSSCO should give loan to group member that are located at the nearest to each other those who can visit each other to discuss about their business in detail daily.

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APPENDIX

HOSMER AND LEMESHOW TEST

CLASSIFICATION TABLE[A,B,C]

Observed			Predicted		
			know the credit default of the group		
			Yes	No	Percentage Correct
Step 0					
	know the credit default of the group	Yes	0	93	.0
		No	0	110	100.0
	Overall Percentage				54.2

a. No terms in the model.
b. Initial Log-likelihood Function: -2 Log Likelihood = 281.418
c. The cut value is .500

OMNIBUS TESTS OF MODEL COEFFICIENTS

		Chi-square	Df	Sig.
Step 1	Step	50.470	24	.001
	Block	50.470	24	.001
	Model	50.470	24	.001

MODEL SUMMARY

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	230.947[a]	.220	.294

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

HOSMER AND LEMESHOW TEST

Step	Chi-square	df	Sig.
1	4.387	8	.821

CLASSIFICATION TABLE[a]

Observed			Predicted		
			know the credit default of the group		Percentage Correct
			Yes	No	
Step 1					
	know the credit default of the group	Yes	58	35	62.4
		No	25	85	77.3
	Overall Percentage				70.4

a. The cut value is .500

CONTINGENCY TABLE FOR HOSMER AND LEMESHOW TEST

		know the credit deffoult of the group = yes		know the credit deffoult of the group = no		
		Observed	Expected	Observed	Expected	Total
Step 1	1	17	16.795	3	3.205	20
	2	15	15.355	5	4.645	20
	3	14	13.346	6	6.654	20
	4	11	11.116	9	8.884	20
	5	10	9.420	10	10.580	20
	6	10	8.064	10	11.936	20
	7	5	6.718	15	13.282	20
	8	5	5.678	15	14.322	20
	9	2	4.133	18	15.867	20

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