

**ASSESSING THE EFFECTIVENESS OF GROUP LENDING AND  
ITS IMPACT ON PROFITABILITY IN CASE OF JIMMA ZONE  
OROMIYA CREDIT AND SAVING SHARE COMPANY**

**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF  
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IN ACCOUNTING AND FINANCE**

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***Assessing the Effectiveness of Group Lending and its Impact on Profitability, in Case of Jimma Zone Oromia Credit and Saving Share Company (OCSSCO)***

**BY**

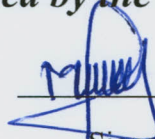
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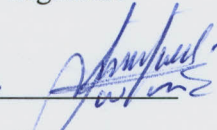
  
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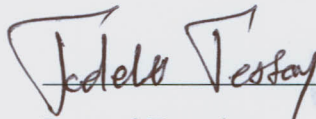
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
  
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## **Acronyms**

MFIs	Microfinance Institutions.
MF	Microfinance.
OCSSCo	Oromiya Credit and Saving Share Company.
CMLF	Community Managed Fund.
SLA	Saving and Loan Association.
RLF	Revolving Loan Fund.
CBO	Community Based Organization.
FINCA	Foundation for International Community Assistance.
NGOs	Nongovernmental Organization
VB	Village Bank
OLS	Ordinary List Square



## **Abstract**

*This study was focused particularly on assessing the effectiveness of group lending and its impact on profitability at Oromiya Credit and Saving Share Company of Jimma Zone. To achieve this objective, the researcher used primary and secondary data. The researcher used questionnaires, interviews and relevant documents to gather primary and secondary data from the data sources and collects the questionnaires from 252 borrowers and interviewed 4 branch manager of OCSSCO from the population.*

*Descriptive statistics with the help of Pie charts, graphs, table, Percentages were used in analyzing the collected data. In addition to this econometric model by employing SPSS (Statistical Package for Social Scientists) version -16 windows software were used to analysis. With the help of logit model the researcher 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 at 1%, 5% and 10% significance level. 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, Group lending, OCSSCO of Jimma zone, Logit model*

# CHAPTER ONE

## INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

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 (loan) 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. Micro-loan is, therefore, a synonym for microcredit, and this financial service is in focus since it is the main service of the MFI's. 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. The average loan size of an MFI is an interesting factor since that the smaller the loans are the more expensive to disburse than larger loans (Jorgensen, 2011).





The terms microcredit and microfinance are often used interchangeably, it is important to recognize the distinction between the two. Microcredit refers to the act of providing the loan. Microfinance, on the other hand, is the act of providing these same borrowers with financial services, such as savings institutions and insurance policies. In short, microfinance encompasses the field of microcredit (Sengupta *et.al* 2008).

Micro-finance is one of the ways of building the capacities of the poor who are largely ignored by commercial banks and other lending institution and graduating them to sustainable self-employment activities by providing them financial services like credit, savings and insurance. By focusing on small amounts, and easing collateral requirements, micro finance institution are better equipped to target poor individuals or groups who need resources to finance small scale investments. These Loans can be sufficient to promote independent and profitable economic projects, expand the opportunity set faced by poor group's member and thereby alleviate poverty (Rai *et.al* 2011).

In countries where poverty levels are high and financial services do not reach the vast majority, 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 group of borrowers is 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 to future loans. 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).

Dellien *et.al* (2005) discusses two key points about group lending programs. First, time and effort is invested in building social networks that enable groups to select members who are creditworthy under group lending, the role of loan officers is to provide structure, training on loan processes and administrative support. Second, the principle incentives for repayment of group loans is joint liability, group reputation, credit rating and future access to credit for each member, all of which are directly reliant on each member up holding their obligations.

Like in other areas of the world, peoples in Ethiopia are living under poverty. Finance institution in general and microfinance institution in particular plays crucial role in the development of Ethiopia in general and Jimma zone of oromia in particular. However, no study has been under taken in Jimma zone regarding any group lending in general and effectiveness of group lending and its impact on profitability in particular.

## **1.2 Statement of the problem**

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).

Lack of access to external finance is generally seen as one of the main reasons why many people in developing economies remain poor. Usually, the poor have no access to loans from the formal banking system, because they cannot put up acceptable collateral and because the costs for banks of screening and monitoring the activities of the poor, and of enforcing their contracts, are too high to make lending to this group profitable. The poor in developing economies have increasingly gained access to small loans with the help of so-called microfinance programs (Heremes *et.al* 2003).

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. The 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).

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. In Ethiopia research have been done on determinants of access to credit and loan amount household-level evidence from urban Ethiopia but not considering of theoretical part of effectiveness of group lending and its impact on profitability. Abi (2000) attempted to examine the determinants of access to credit and loan amount house hold –level evidence from urban Ethiopia using information obtained only from



urban clients. The Past studies in Ethiopia on microfinance institution focused on determinants of access to credit and loan amount on house hold level evidence from urban Ethiopia. As well Guush and Gardebroek (2012) held on the studies on the assessing the long term impact of micro credit on the rural poverty which is emphasized on the long term impact of in microcredit in Ethiopia. However, if any development effort is to bring about improvement in the microfinance institution group lending and its impact on profitability, making the group benefited of an increased production, consumption, education and health - such as, what are the impacts of group lending on profitability? -should be answered so that appropriate interventions can be made. However, this thesis has been examined on different problems associated with that reduce the effectiveness of group lending and its impact on profitability of microfinance institutions.

### **1.3 Research Question**

Do the internal rule and conduct, have effect on group lending effectiveness and its impact on profitability?

Does the credit default of the group for the disbursed loan show that the ineffectiveness of the group lending and its impact on profitability?

### **1.4 Objectives of the Study**

#### **1.4.1 General objective**

The main objective of the study is to examine and assess the effectiveness of group lending and its impact on profitability in OCSSCO of Jimma zone

Especially this study was addressed on the assessment of effectiveness of group lending and its impact on profitability in OCSSCO Jimma Zone assuming the following Specific objectives.

- ✓ To identify factors that affect the effectiveness of group lending
- ✓ To assess the profitability of group lending on the group member living standard and
- ✓ To provide the mechanisms of improving the effectiveness of group lending.

### **1.5 Significance of the Study**

An effective and efficient loan is important for the economic development of the borrowers. Because if there are effective and efficient loan will be implemented, there may be an increase in





income, which helps to fulfill the socio-economic needs of the individual or borrowers of the institution. Accordingly, improvement in the loan of microfinance institution is of great importance for micro enterprise in which loan serve as assets.

The finding from this thesis, therefore, is expected to benefit various stakeholders in numerous ways. Some of these are:

- This study initiates the institution to give closer attention towards the administration and follow ups as well as conduct awareness creation programs to achieve the desired objectives.
- This study contributes towards effectiveness of the loan system by identifying impeding factors for the borrowers of OCSSCO of Jimma zone of Oromia region.
- It indicates the ways that the institutions officials will have to do in the future base on the views of the borrowers towards the loan.
- The research significantly in providing a reference material for those who are interested in conducting further research on the area of loan in microfinance institution.

### **1.6 Scope of the Study**

The study purposively focuses on OCSSOCO in Jimma zone of Oromia region. Therefore, the study had been limited to the Jimma zone. In addition, collection of data on assessing the effectiveness of group lending and its impact on profitability is collected using transaction surveys to capture occasional variations. And the survey has been only for short period of time and this had obviously limited the temporal dimension of the study.

### **1.7 Limitations of the Study**

It is obvious that adequate and reliable information is important to undertake any kind of survey precautions. In addition, since lending with microfinance institutions are a current phenomenon, especially in Jimma zone the absence of enough reference materials regarding the group lending effectiveness and its impact on profitability and Availability of the respondents due to their busy schedule was also a challenge cited as one of the limitations of conducting this study.

## **1.8 Organization of the thesis**

This thesis attempts to assess the effectiveness of group lending and its impact on profitability in OCSSCO of Jimma Zone. Accordingly, the thesis is organized in a way that chapter one deals with the introduction of the study, chapter two presents the Review of the Related Literature, and chapter three brings the Research Methodology part of the study. Chapter four presents the findings, data presentation and interpretations as well as the last chapter deals with the Conclusions and Recommendations parts of the study.

## CHAPTER TWO

### THEORETICAL LITERATURE REVIEW

#### 2.1 BASIC CONCEPTS AND EVOLUTION OF GROUP LENDING

Group lending, as the term already indicates, requires individuals to organize themselves into groups in order to gain access to financial services from a program (Mehrteab, 2005). Aghion and Morduch (2005) defined Group lending as arrangements of individuals without collateral who get together and form groups with the aim of obtaining loans from a lender. It involves the formation of groups of people who have a common wish to access financial services.

Group lending refers to the different methods used for the common goal of lending to low income households that are different from the standard loan contracts. It is the establishment of institutes or networks with a system that would utilize the societal assets of the borrowers in the absence of physical possessions (Khawari, 2004).

Many group based lending programs target the very poor who cannot meet the traditional collateral requirements of most financial institutions. The special characteristic is that the loans are made individually to the group members, but all in the group mate the result if any member going to serious repayment challenges. Since the establishment of the Grameen Bank in Bangladesh in 1976, the exercise of group lending has been widely adopted in microfinance programs in developing countries as an important tool to give credit to the poor. In group lending (or joint liability) a loan is granted to a group of borrowers and the whole group is responsible for the debt of any individual member in the group (Li *et.al* 2009).

Li et al, (2009) State that the origin of group lending can be traced back to 1976 when the 2006 Nobel Peace Prize winner, Muhammad Yunus, started the Grameen Bank Project, a lending project in several villages in Bangladesh. The objective of the project is to examine the feasibility of a credit delivery system (Grameen Bank) specifically targeted to the rural poor, who often do not have collateral and cannot obtain credit from predictable banks. In case of requiring collateral, group lending system employs a group-based loan approach and depends on peer effects within groups to guarantee repayment. The project has achieved great success in delivering credit to the poor. The achievement of Grameen Bank in Bangladesh has inspired



similar endeavors in more than 40 developing countries, including one of Bangladesh's neighbors, India (Hermes *et.al* 2003).

Different programs and projects are involved in providing loans to the groups. Sometimes, governments own and run these programs; in other cases international institutions, local and foreign NGOs are involved in reaching poor borrowers. Group based lending works as follows. Loans are made to individuals, but all members of the group are held responsible for the loan repayment (joint liability principle) (Mehrteab, 2005).

Group lending involves the formation of groups of people who have a common wish to access financial services. Under group lending, peer pressure and group guarantee, replace collateral. The group guarantee involves the strict joint liability of group members. In case of any default of any of the members, all group members are not given loan until the members have repaid the loan totally. This calls for peer pressure from other members. The peer pressure acts as repayment motives since the members do not want to let down other members of the group or suffer any social sanction imposed on the group as a result of default. Default of a member may lead to a group member losing their own savings to repay the loans. Because of this many members prefer individual loans rather than being financially punished for the irresponsible repayment of other group members (Sheilah, 2011).

The group lending is based on the elements that constitute its key factors of success. The first of all is the self-selection of the group members that means the choice of members is done in a freeway, personally, and without the influence of the loan officer. Thus, the group is responsible for the choice of his/her members. The second is monitoring of projects. The second is obligation of members to pay repayments Nevertheless; the money borrowers have limited choices to oblige borrowers in delay to repay their credits (Bassem, 2008).

### **2.1.1 Approaches to Group Lending**

Group lending programs can be subdivided into Solidarity Group approaches and Community-Based Organization (CBO) approaches. The difference between the Solidarity Group approach and CBO approach to group lending has to do with the anticipated future relationship between the lending body and the borrower group. CBO approaches have as a main goal the eventual independence of the borrower group from the lending body. To this end, the lending body

inspires the development of the internal financial management capacity of the group, so that the group can act as its own mini-bank. Solidarity Groups are those programs that do not anticipate the eventual graduation of the borrower group from the lending institution. Participants are considered long-term “clients” of the program (Brandt *et.al* 1996).



Source;- Brandt *et al* (1996)

### 2.1.2 Solidarity Group Lending Models

Solidarity Group lending model includes the Grameen model, the South American Solidarity group model, and Village banking .These three models are explained as the following.

- A) **Grameen Bank.**This model is based on group peer pressure where by loans are make to individuals in groups for four to seven. Group members collectively guarantee loan repayment, and access to succeeding loans is dependent on successful repayment by all group members (Wrenn 2005 sited in Alemayehu 2008). According Mihreteab 2005 the Grameen Bank borrowers are grouped voluntarily into groups of five and they take training on how the credit program works and start saving before they apply for a loan. In addition the new groups of borrowers meet and save for a minimum of four weeks before any loans are issued. Loans go first to two members, then to another two, and then to the fifth group member and the cycle of lending continue when the loan is totally repaid (Tadesse 2007.The Grameen Bank does not require collateral from its clients. If any group member defaults on a loan, the other four members must cover the loan. If they do



not do this, none of the other members will receive a loan until the non-performing loan is repaid (Mihreteab 2005).

**B) Latin American solidarity group lending.** This is a Latin American version of the Grameen Bank. It is the Banco Solidario (Bancosol) of urban Bolivian's pioneer of model of lending. Like the Grameen Bank, it lends to groups, but its difference from Grameen is, it forwards loans to all group members at once. It issues uncollateralized loans, starting with small amounts of loans and frequent repayment. The repayment schedules are flexible, and allows borrower to choose between weekly, fortnightly and monthly repayments. The duration of payment is also flexible from one-month up to a year. Loan amounts and terms gradually increase once clients have demonstrated that they are capable of taking on larger loans. Future larger loans are depending on punctual and full repayment of small initial loans (Mihreteab 2005).

**C) Village banks (VBs).** It is originated in Latin America in the 1980s and over the years it has been adopted in African and Asian countries. As the name indicates, it is a village-based and community-managed credit and savings association established to provide access to financial services in rural areas. Most of the time, donor-NGOs are active in setting up village financial institutions in partnership with local groups. VBs are initially financed through loans provided by a lending institution such as the Foundation for International Community Assistance (FINCA) (Mihreteab 2005). The large group of villagers is subdivided into eight five person groups, each with its own chairperson and the eight chairs in turn hand over their groups' passbooks to the loan officer (Aghion and Morduch 2005).

### **2.1.2 Community-Based Organization (CBO) Approaches**

Models of group lending which have as a primary goal the development of the internal financial management capacity of the group are characterized as CBO models. CBO approaches aim to develop a mini-bank, independent of the lending institution, owned and managed entirely by the poor. Micro lending models using the CBO approach can be divided into two subgroups: Community-Managed Loan Funds (CMLF) or saving and Loan Associations (SLA). The distinction between CMLFs and SLAs is



A) CMLFs receive initial funding from outside the organization (in the form of a loan or grant). There are two main approaches to community-managed loan funds—Village Banking and Revolving Loan Funds.

B) SLAs generate all funds internally (through member savings or retained interest) and receive no external funding (Brandt *et.al* 1996).

#### **A) Village Banking**

Village Banking is probably the most practiced kind of Community-Managed Loan Fund. The Village Banking methodology was developed by the Foundation for International Community Assistance (FINCA), a U.S. based nonprofit organization that specializes in rural credit. Programs using this methodology have been widely replicated in different parts of the world by other NGOs. A Village Bank is initially financed through loans provided by a lending institution. Over time, member savings, share capital and accumulated interest are expected to grow large enough so that no external funding will be necessary (Brandt *et.al*, 1996).

#### **B) Community-Managed Revolving Loan Funds (RLF)**

The Community-Managed Revolving Loan Fund model is similar to the Village Bank model in important ways. Both models use initial outside funding to work towards the goal of establishing an independent and sustainable bank, run and managed by the local community. Outside funding is channeled directly to the RLF, which then makes loans to individual members. A RLF group typically consists of between 30 and 100 members, often women. Like the Village Bank model, the RLF model requires members to save prior to the initial loan (Brandt et al, 1996).

#### **C) Savings and Loan Associations**

A Savings and Loan Association (SLA) is very similar to a community managed loan fund with one important distinction: funding for SLAs comes from member savings and equity contributions only, and no outside funding is accepted. Savings and Loan Associations are always entirely financially independent of outside institutions, even in the startup period. Development institutions and NGOs may contribute technical assistance and training in the startup period, but loans are always financed entirely by the member base (*ibid*).

### **2.1.3 Advantages of Group-Based Lending**

One of the expected advantages of group lending programs and joint liability is that since this mechanism stimulates screening, monitoring and enforcement within the group, and since it improves the effectiveness of these activities due to the fact that members live in the same area and/or are socially tied, repayment of group loans will be higher (Hermes et.al 2003). The success of group lending in concession of credits to poor borrowers has been assigned to its faculty to attenuate the asymmetry of information and enforcement problems that faces the MFI in the individual micro lending. The ability of group lending institutions to conquer the informational asymmetry and enforcement problems has been considered as the driving force behind their supports to the poor, their sustainability, and their repayment performance (Bassem, 2008).

- A) **Peer pressure:** - One important feature of group based lending is the use of peer pressure as substitute for collateral. Many people presume that group guarantees involve the strict joint liability of group members, members are seldom held responsible. The default of one member generally means that further lending to other members of the group is stopped until loan is repaid. (Tadesse 2007).
- B) **Reducing transaction costs:** - Tadesse 2007 state that group lending reduces certain institutional transactional costs by shifting all activities to the group MFI can reach many numbers of clients. Self-selection is so important because the members of the same community generally have excellent knowledge about who is a reliable credit risk and who is not. The costs of screening and monitoring loans and costs of enforcing debt repayments could be substantially reduced (Aghion and Morduch 2005).
- C) **Addresses information problems:** - Group lending contract addresses the problems of information imperfections that cause adverse selection and moral hazard. (Tadesse 2007).
- D) **Mitigating Adverse Selection:** - The adverse selection problem occurs when lenders cannot distinguish inherently risky borrowers from safe borrowers. The fact that groups are enforced to form on their own is the key to the solution; potential borrowers can then use their information to find the best partners (ibid).



#### 2.1.4 Limits to Group Lending

Group lending institutions have better repayment rates than individual lending programs in good years but worse repayment rates in years with some type of crisis. If several members of a group encounter repayment difficulties the entire group often collapses, leading to domino effect. This signals the inherent instability of group lending in risky environments (Tadesse 2007).

On the other hand, there are many theories that suggest that joint liability might not work as well in practice. These critics argue that group liability mechanisms contain hidden costs for the borrower, increase risks of collusion against the MFI, and create deadweight loss in those cases where “good” borrowers are excluded from future lending when the group defaults (Burton 2011). Mehreteab 2005 discussed group-based lending limitations and shortcomings as bellow.

**A) Domino effect.** In group-based lending programs the possibility of collusion of all members not to repay cannot be ruled out. The very assumption of joint liability might make the decision for or against loan repayment a strategic one that is taken by all borrowers. Apparently, a group member will not be prepared to repay his loan if he expects other members to default, because if this happens he will be denied access to additional credit or his share in making payments for others increases. This is also called the domino effect.

**B) Joint liability is not optimal.** In group-based lending the joint liability contract is seen as the main driving force for members to actively monitor and reinforce repayment. By cross-reporting we mean that if group member *i* fail to repay, borrower *j* receives a harsh punishment only if borrower *i* reports that borrower *j* is withholding some output from the lender. This allows an unsuccessful borrower *i* to pressure *j* (the successful partner) to repay his/her loan if possible.

**C) Limitations of social collateral.** As is mentioned before, one of the key problems that led to group-based lending is the poor lack any sizable physical assets that can be used as collateral in enforcing repayment. Therefore, group-based lending programs rely on credit denial and social sanctions in enforcing repayment and these alternatives are often grouped together and termed social collateral.

**D) Group size and free riding.** The extent to which group-based lending can minimize the asymmetry of information problem depends among other things on the optimal group size.



E) **Matching problems between demand and supply.** Another negative influence on repayment occurs when the credit terms and conditions are no longer appropriate for each member, creating an inherent “matching problem” as group-based lending is repeated over time (Paxton *et.al* 2000 cited in Mehreteab 2005). At the beginning of a lending program, borrowers may be able to find group members with the same demand for loans and a similar supply, but the probability of the same group desiring consecutive loans with similar loan amounts diminishes over time (Mehreteab 2005).

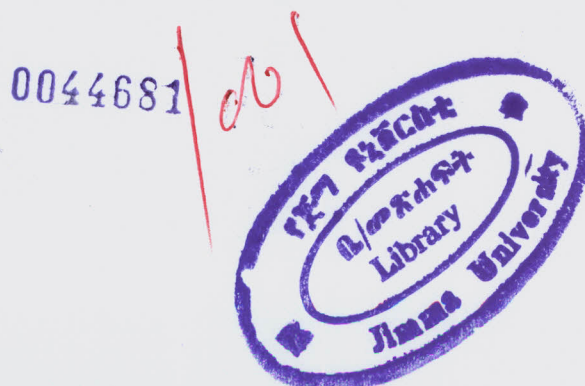
#### **2.1.4 Risks to Group Delivery Methodologies**

Many of the MFIs practice solidarity and village banking methods to serve their clients. Group lending methods are based on risk management that relies on peer pressure and the solidarity of members who support each other. The strength of groups is evident when members, for example, make payments for another member who may temporarily be unable to make their payments in order to ensure that the group remains in good standing with the MFI and continues to receive loans. However, when the burden of debt becomes too much for non-affected group members to handle, this affects their ability to repay, affects group morale, and may lead to breakdown in group cohesiveness, peer dynamics and guarantee mechanisms. Ultimately, it may lead to increased attrition rates as the sick and weaker members are rejected from groups (Tadesse (MD, MPH) *et.al* 2008).

#### **2.1.5 Guidelines for effective use of groups**

Tadesse Demissei 2007 lists the following guidelines for effective use of the groups

- A. Groups are more effective if they are small and homogeneous.
- B. Imposing group penalties and incentives (such as no access to further loan while an individual is in default) improves loan performance
- C. Loan sizes that increase sequentially appears to allow groups to screen out bad risks
- D. Staggered disbursement to group members can be based on the repayment performance of other members.



### **2.1.6 Group-based lending and repayment performance**

Repayment of loans is an important measure for the success of these programs. In the long run, programs may only survive if groups repay the loans they receive. Otherwise, the programs will need continuous external financial support, which may not always be available. Moreover, low repayment rates provide adverse incentives to groups to also not repay their loans (Paxton, *et al* 2000 cited in Hermes *et.al* 2003). Successful programs like Grameen Bank and Bancosol have shown high repayment rates, as high as 90 to 95 percent of all loans made to groups. At the same time, these programs are able to reach millions of poor borrowers. The high repayment performance of these programs is attributed to their ability to curb problems arising from asymmetry of information related to loan contracts (Hermes *et.al* 2003 ).

### **2.2 Empirical Literature**

Since the beginning work of Mohamed yenus (1976) the question on the effectiveness of group lending in microfinance institution has been a major literature. After that many studies have been conducted in both developed and developing countries to identifies the factor that have effects on the successes or un successes (effectiveness of group lending). Based on the time constraint and the number of empirical literature available on the related title of this research it will be quite difficult to present the results of all researches. Therefore the empirical studies in this, on the effectiveness of group lending and its impact on profitability will focus on those that have been conducted after 1976's.

Ghatak (1999) undermine that a borrowers who cannot offer any collateral are asked to form small groups which are jointly liable for the debts of each other .In addition to this he provides a theory based on two contractual feature of group lending programs to explain why they (groups) can potentially achieve high repayment rates despite the fact that the borrowers are not required to put in any collateral. That is the existence of joint liability and the selection of group members by themselves. In his study the high repayment rates of the group members show that the effectiveness of the group lending and its impact on profitability. Because when the group pays their loan on time and the loan they borrow it is effective to both parties (borrowers & lenders).

Sharma and Zeller (1996) use data of 128 groups from four group-based lending programs in Bangladesh to study the determinants of 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) Paxton *et.al* (1996) stated that by 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 & 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 Banglادish.

To the help of the above Wydick (2000) showed that the threat of group credit insurance, social sanctions against groups members who misallocate borrowed of group lending mitigates some



risky investment behavior. At the same time he found out that group lending imposes significant costs to borrowers over individual lending.

Hermes *et.al* (2003) with 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 groups. In opposite to it is not true for social ties of other group members. As well as they suggest 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.

Baland (2010) described microfinance lending has benefited millions of borrowers. MFIs have promoted their impact among the very poor and at recent favored individual contracts than group contracts. Their work understand by using model, there is a single investment project and access to credit is limited by weak repayment incentives and absence of large social sanctions, the poorest borrowers are offered individual and not group contracts. In contrast to the individual contracts the compared profit from group loans are shown to be decreased in loan size. Also they explored the benefit effects of group size and requiring small loans are better served by larger groups but group size effects are ambiguous. For their investigation they use different variables which help them to achieve their findings. The variables the used are loan size social sanction by the members and by the bank and other variables the same with the others (researchers). The study motivated by common observation that group loans with joint liability appear better comforts for the moderately poor than very poor. This is true by identifying how repayment rates and credit contracts vary by loan amount. The study builds on the standard approach in the literature of group lending. With this framework they arrived on that for a given investment

project, poorer borrowers face a higher cost of capital under joint liability and gaining from group lending increasing in initial borrower wealth.

Jemal (2003) conducted study at OCSSCO kuyu wereda of North showa of oromiya with the aim of analyzing the factors that influence microfinance loan repayment, 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 his estimations 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. Jemal study sex's influence on the repayment performance of repayment in both ways. i'e the female borrowers are better while males are not good in repayment of loan as females. In general the literature written in this chapter describes about the repayment performance of the borrowers which help the researcher to identify the effectiveness of the group or ineffectiveness of it and its impact on profitability.

Zeller (1996) state group lending has received much attention in recent years because of its perceived potential in providing financial services to poor households that lack traditional collateral. The analysis focuses on the effects of program design, community and group characteristics on the repayment performance of groups, using a data set on groups from six different lending programs in Madagascar. The results show that socially unified groups pool risks by misusing the members' asset that their repayment performance is improved even in communities with high-risk exposure.

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 es salaam, Tanzania. In the study the logit model was used. The model 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 the result by the result by the help of probit model as, 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.

### **2.3 Conclusion and knowledge gap**

This chapter reviews the literature on group lending starting with the famous relevance of Mohamed Yunus Grameen Bank of 1976 in Bangladesh. Group lending is an arrangement of individuals without collateral who get together and form groups with the aim of obtaining loans from a lender (Li *et.al* 2009). Non-repayment by the group means that all borrowers in the group will be denied future access to loans from the program. In this way, group lending creates incentives for individual group members to screen and monitor the other members of the group and to enforce repayment, because each individual wants to reduce the risk of having to contribute to the repayment of loans of other members and since he/she wants to ensure access to future loans (Hermes *et.al* 2003).

Under group lending, peer pressure and group guarantee, substitute collateral. The group guarantee involves the strict joint liability of group members. In case of any default of any of the members, all group members are stopped loan until the members have completely repaid the loan (Sheilah, 2011). In some programs loans are given strictly for a certain period of time (usually a year), while in other programs the members are allowed to decide the loan terms themselves. Repayments are made on a weekly or monthly basis; this is done at group meetings or directly to the branches of the microfinance institution. Nowadays, worldwide many programs use group-based lending to forward loans to the poor (Mehrteab 2005).



Similarly, the findings of prior have provided varying evidence related to the group lending regarding. For instance, Sharma and Zeller (1996) have studied the Repayment Performance in Group-Based Credit Programs in Bangladesh. In addition to this in neighbor country at Eritrea there are many researches on group lending but not regarding to the effectiveness of group lending and its impact on profitability. In Ethiopia, Jemal (2003) studied the Microfinance and Loan Repayment Performance at OCSSCO of oromiya in kuyyu woreda. However, As to the knowledge of the researcher there is no study conducted on the effectiveness of group lending and its impact on profitability in MFI especial reference to jimma zone. Therefore, this study will fill the gap by examining the effectiveness of group lending and its impact on profitability in ocso of jimma zone of oromiya.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3. INTRODUCTION

The second chapter tried to discuss the literature review along with the knowledge gap that this study had been filling. This third chapter present the research methodology along with the detailed methods planned to be used in the study. In this section, the research concentrated on the method adopted throughout the study. First, the study area, target population survey design, types and nature of the data, method and instrument of data collection, sampling technique, sample size determination, and data discussions as well as presentations.

#### 3.1. The Study Area

The study on the assessment of the effectiveness of group lending and its impact on profitability has under taken in Jimam zone of Oromia regional state which is located at 345 km south west of the Addis Ababa. It's a special Zone of the Oromia Region. It has a latitude and longitude of 7°40'N 36°50'E. The Jimma city was the capital of Kaffa province up to the province was dissolved. In the early 1960s it was the greatest market in all of southwestern Ethiopia. Jimma is named by King Aba Jifar. Similarly Jimma city was taken as a Centre of commercial starting from the very beginning of 18<sup>th</sup> century. (<http://en.wikipedia.org/wiki/Jimma> jan,2014).

#### 3.2 Research Methods and Data source

##### 3.2.1 Data source and data collection technique

The study was made by the use of primary data. The primary data to be generated include characteristics of borrowers, loan size, age of borrowers, marital states of the users, and etc. The researcher used instruments as self-administered questionnaires and semi-structured interviews to collect primary data from the respondents.

##### 3.2.2 Sample Size and Sampling Procedure

This study had two components of respondents and two sample populations. The group lending effectiveness and its impact on profitability survey done on **252** samples of group borrowers and have a sample of Four OCSSCO workers ( especially branch manager) for interview. A two stages sampling technique had been used to draw sample from the population. In the first stage, fourworedaswill be randomly selected among **16** woredas among the woredas that OCSSCO has

a branch within the zone. In the second stage, 252 group borrowers had been randomly drawn from each of the four woredas these woredas are Karsa, Mana, Sakka cokorsa and Gomma woreda. This made the total sample for the survey to be 256. This sample size is determined by using the thumb rule of sample size determination. To determine sample size the researcher used the following formula, by assuming that  $\Delta = 0.5$ . That is in the absence of specific information about  $\Delta$  or  $\sigma$  effect size of  $\delta$  could be 0.5 that is the medium one to survey sampling determination.

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

Where  $n$  = the sample size and

$\Delta$  = variance

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

Based on the above description and result, the researcher multiplied the result by number of the woredas randomly selected. So the result is  $64 \times 4 = 256$ . The 64 respondents among the woredas are selected by the stratified or quota random sampling.

### 3.3 Method of Data Analysis and presentation

The study used both descriptive statistics and econometric regression analysis to deal with the research questions and thus achieve the objectives.

#### 3.3.1 Descriptive statistics

Descriptive measures had been employed to examine, describe, and compare the lender and borrower function, socio-economic characteristics of the borrowers, role of internal rule, loan officer's activities, peer pressure and age and others. In the descriptive analysis dataset the data had been analyzed through percentage and table, graphs, charts, pie charts used to present the data. As well as the researcher used statistical package for social sciences 16.0 version (SPSS16.0) software for data analysis. The results of the analysis of descriptive statistics percentage reported give information about the variables under investigation. Also, in order to examine the possible degree of Multicollinearity among the regresses, correlation matrixes of the variables of the study have been calculated. The correlation statistics is helpful to gain initial



insight regarding the relationship between the variables used in the study. The researcher has used dummy variables to measure how the group lending is effective and its impact on profitability.

### **3.3.2 Econometric Analysis**

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 the researcher used the Logit model.

Based on the variables in Paxton the principal previously specified where repayment is a function of the processes repayment, which shows the effectiveness of the group and impact of the group effectiveness on profitability. In addition to the variables specifically given in their model (such as group homogeneity, group solidarity, and etc.) additional variables that have been supported by other theoretical and empirical research had been added to the variables influencing loan repayment, which show the ineffectiveness or effectiveness of group (Training, location factors, and experience working in groups, age, sex, opportunity of other source family size, land size and so on). If the repayment problem (the sign of the group's ineffectiveness) is high, the individual may determine to solve the problem by him/herself so that others in the group do not get angry on him/ her. If the individual has confidence in the group or no other preparation is possible, he/ she may report the problem to the group. It is then the intragroup contract that determines whether or not the loan is repaid, that is the group lending is effective (succeed) and has impact on profitability based on their determination. By incorporating each of these variables, the model is capable of showing what influences are the most important in identifying the group's lending effectiveness and its impact on profitability. The model is flexible enough to use data sets from woredas of the zone. Several stages in the repayment process which show the

successful or group lending is effective and it has impact on profitability of the group exist. First, the individual may or may not have problems repaying the loan that help in identifying the effectiveness of the group lending and its impact on profitability. If he/she does, he/she must decide whether to solve the problem independently or tell the group. If the group finds out about the problem, group peer pressure and group solidarity may affect whether or not the loan is repaid that will differentiate the group lending is effective and it has impact on profitability. Based on the above variables, if the cumulative distribution of  $\mu$  is logistic it can be necessary what is known as the logit model. In this case

$$F(z_t) = \frac{\exp(z_t)}{1 + \exp(z_t)} \dots \dots \dots (3.1)$$

Hence;

$$\log \frac{F(z_t)}{1-F(z_t)} = z_t \dots \dots \dots (3.2)$$

Note that for the logit model

$$\log \frac{p_t}{1-p_t} = \beta_0 + \sum_{j=1}^k \beta_j x_{ij} \dots \dots \dots (3.3)$$

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 had been conducted by using the Logit model that has a regression model of

$$y = \sum_{j=1}^k \beta_j x_{ij} + \mu \dots \dots \dots (3.4)$$

Where “y” is dependent variables,  
 “x<sub>ij</sub>” is explanatory variables and  
 “μ” is error term.

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

$$\begin{cases} y = 1 & \text{if } y > 0 \text{ and} \\ y = 0 & \text{if otherwise} \end{cases} \quad (\text{Maddala, 1992}).$$



### 3.4 Explanatory Variables

In this section of this chapter the Explanatory variables of the study are discussed as under bellow.

The following Explanatory variables are followed from the Paxton (1996) of the experience of Burcinafaso and other countries of the world.

**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. The measure of outside borrowing options is the percentage of group members who have access to credit from individuals outside the group. From this the other source of borrowing may have negative relationship with the effectiveness of group lending and its impact on profitability.

**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. In opposite to this the researcher was hypothesized that lending to male is effective and has impact on profitability.

**Training:**-Training may avoid problems from emerging and may teaching groups to develop a stronger intragroup contract, leading to better group lending effectiveness and its impact on profitability. 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 the training may have the positive sign on the effectiveness of group lending and its impact on profitability.

**Screen:**-The variable screen is a dichotomous variable that equals "1" if the group has screen the group to reject a person who wanted to join and "2" 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.

**Distance** The average distance between one group members and other groupmembers. Since the distance of the group member has both positive and negative impact on profitability the sign cannot be determined before the study.

**Peer pressure:** - Peer pressure measures the group members' willingness to influence the in effective partners (groups). Peer pressure may have positivesign on the effectiveness of group lending and its impact on profitability.

**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 group lending and its impact on profitability.

**Loan officer visit/ pressure:** - analysis how the loan officer /staff visit the group.

**Family size** if the group member has large household size, a considerable amount of income from the project could be diverted away from loan repayment which is the sign of group ineffectiveness and had no profitability to household consumption. Therefore, the sign is expected to be negative.

**Land Size** identifying theland size of the borrowers, and its impact on the effectiveness of group lending and its impact on profitability.



**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.

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

## CHAPTER FOUR

### FINDINGS, DATA PRESENTATION AND INTERPRETATIONS

#### 4.1. Introduction

In this part the effectiveness of group lending and its impact on profitability and the result obtained by using the methods of logistic regression estimation and descriptive statistic with the help of SPSS 16.0 version. This includes the result test of correlation and Hosmer and Lemeshow model fitness test among the variables.

The survey was conducted by distributing questionnaires to OCSSCO group based borrower and interview was held with OCSSCO woreda's branch managers. 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. In order to have interpretive data, in some sort of quantitative sense, the researcher constructed the close-ended questions in the form of "Yes"- "No" with items to be chosen as their possible reasons for their responses and items having four points to be rated ranging from "strongly agree" to "strongly disagree" (likert scale) with the suggested values which run through one to four. Open-ended questionnaire and its major purpose were to give opportunity to the respondents to express their feeling, perceptions and intentions related to the effectiveness of group lending and its impact on profitability. The questionnaires distributed to the OCSSCO group based borrower with an English and Afan Oromo version so as to avoid language barriers and minimize response biases due to misunderstanding. The following table summarizes about the respondents which was taken proportionally.



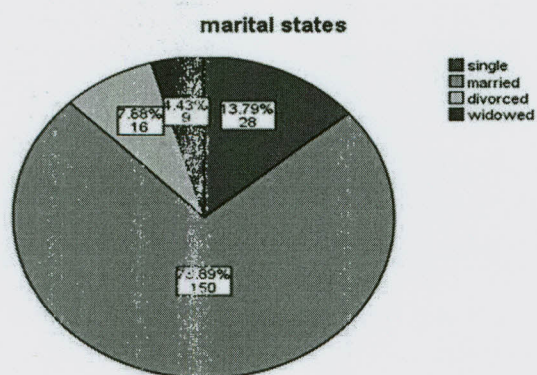
**Table 4.1 Respondents Taken proportionally from woredas.**

OCCSCO group based borrower Sample woreda	Sample size	Percentage (%)	Number of respondents who provide their reply	Percentage (%)
Kersa woreda	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)

The selected sample size of this study was 252 and 4 OCSSCO group based borrower and branch manager of the OCSSCO respectively for whom questionnaire distributed and interviewed. Out of these, 203 from group based borrower were returned the questionnaires and 4 branch manager interviewed. The information obtained from document analyses used as a complementary data for analysis.

**Figure 4.1 the marital states of the respondent.**



Source: survey of (2014)

The above figure 4.1 shows that the responding group members are married by 150 (73.9 %) of the respondents. 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 and its impact on profitability 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.

**Table 4.2 shows the social ties of the group member**

Items	1-18 years	19 -36 years	37-55 years	Above 56 years	Total
Years the group member lived the same area	33(16.3%)	72(35.5%)	56(27.6%)	42(20.7%)	203(100%)
Who initiated the group formation	Members them selves	Group leader	Credit officer		203(100%)
	123(60.6%)	42(20.7%)	38(18.7%)		
How well did you know the member before formed this group.	Good	Hardily	Not at all		203(100%)
	113(55.7%)	47(23.2%)	43(21.1%)		
Participated in other group	Yes	53(26.1%)			203(100%)
	No	150(73.9%)			

Source: Survey data (2014)

This table depicted that the group member have lived around the same area with 33(16.3%), 72(35.5%) 56(27.6%) and 42(20.7%) for the years 1-18 years, 19-36years, 37-55 years and above 56 years respectively. This show that the majority of the group member lived in the same area for 19-36 years which contains 72(35.5%) of the respondents of the study. Since the group member have lived in the same area for long period of time the groups living at the same around, their impact on the effectiveness of group lending and its impact on profitability is very high. This is because of the group know detail about each other in all cases. For the question who initiated the formation of the group 123 (60.6%) of the respondents said that the formation is initiated by themselves while the rest of them 42(20.7%) and 38(18.7%) of them said that it is initiated by the group leader and credit officer respectively. So the group formation is initiated by



the group members themselves the group effectiveness and its impact on profitability encouraged. The group members who do not know at all the group member accept the group member because of he/she is the relative of the other group members, he/she is a friend of other group members and his/her business looks good. Other controlling variable under social ties is that participating in other group before participate in this group. The answer to this question given by the respondents is No by 150(73.9%) of the group members did not participate in other group and 53(26.1%) of the respondents participate in other group member before they become the member of the recent of his/her group. They leaved their previous group because of the first group do not have an agreement on their business activities, loan repayment, benefit sharing and not equally struggle for the effectiveness of the group lending and its impact on profitability of their group.

**Table 4.3 shows the group ever refused loan from financial institution**

Items	Yes	No	Never applied	Total
Has any bank /some other lending institution ever refused you loan	37(18.2%)	24(11.8%)	142(70.0%)	203(100%)

Source: Survey data, (2014)

The table 4.3 shows that the group ever refused loan from financial institution. For any bank/lending institution ever refused you loan the majority of the respondents with an account of 142 (70%) never applied for loan because the respondents never consider that they can get loan from other that is banks and other institution because they think that they cannot get loan from them for the reason of the group borrowers do have a loan of OCSSCO of Jimma zone. The remaining of the respondents are refused with 37(18.2%) of the total respondents. They are refused because they do not have enough collateral, do not know as they can get from banks & other lending institutions and there is no consignor. Plus the respondents are not refused to the loan from the banks/ other lending institution with the respondents of 24(11.8%). So in general the group members did not apply for any bank/lending institution to got loan from them. This has its own contribution to the group effectiveness and its impact on profitability.

**Table 4.4 shows the solidarity of the group**

Items	Yes	No	Do not remember	Total
Have you had credit default in repaying your debt in the current loan cycle	139 (68.5%)	61 (30%)	3 (1.5%)	203(100%)
Do you have help from your group members to pay your credit	Yes	No		
	148(72.9%)	55(27.1%)		203(100%)

Source: Survey data, (2014)

As can be observed from table 4.4 above among 203 respondents 61 (30%) replied that they do not have had problems of credit default in the current loan cycle. As per findings, majority 139 (68.5%) of the respondents said that they do have had problems of credit default in their current loan cycle while the remaining 3(1.5%) of the respondents do not remember whether they had problems of credit default in the current loan or not. So that since the group member had a problem of credit default the effectiveness of group lending and its impact on profitability is decreased. The majority of the respondents who face the problems of credit default list their reasons of defaults in the current loan cycle profit loss with the majority respondents of 65 (46.76%) among those face the problem of paying their current loan, 17 (12.23%) of them said that their unable to pay the credit is due to the natural disaster problem, while the rest of the respondents 40 (28.78%), 10 (7.19%) and 7 (5.04%) of them cannot pay their credit because of competition was though among the competitor, death of family member and illness of family member respectively. It can be concluded that the group members face the problem of paying their current loan because the market competition is though among the competitors.

While the respondents who do not have had the problems of credit default of their current loan said that they did not face the problem because of the groups get the loan for short period of time that is for 2-3 rounds, at that time they encouraged each other and think for the future access of loan they pay their credit. During this the group lending effectiveness and its impact on profitability can be showed by the group borrower. Also for the survey question do you have help from your group members to pay your credit, the respondents with the size of 148(72.9) said



that they got help from their colleagues. Based on this the group members got help from their colleagues. The help they got from their colleagues are money to pay their credit default and moral supports as they are jointly liable for their credit as the respond from the respondents plus the group member helped averagely by 3 of the group members. And the other of the group member that is 55(27.1%) said that they did not got help from their group member because of the group member by him/herself can pay the credit default happened by the group's member.

**Table 4.5 shows the loan diversification**

Item					Total
Has anyone member of your group member misused loans	Yes	64(31.5%)			203(100%)
	No	139(68.5%)			
How it affect your group business	Badly	Somewhat bad	Strongly bad	Not at all	64(100%)
	17(26.7%)	15(23.4%)	21(32.8%)	11(17.2%)	

Source: survey of (2014)

Table 4.5 shows the responding, the group member did not misuse the loan they got from OCSSCO of Jimma zone. The group member used the loan for the purpose of they borrowed it. So the effectiveness of the group lending and its impact on profitability is increased as the group member did not misused the loan they got. The respondents did not misused the loan they borrowed with the respondents of 139 (68.5%) and 64 (31.5%) of them misused the loan borrowed for other purpose such as personal consumption, to buy exercise books and uniforms to their children. Hence the borrowed money from the OCSSCO by the group members is not misused by the group members, the effectiveness of group lending and its impact can be increased. For the question how it affects the business of the group, the respondents said that badly, somewhat bad, strongly bad and not at all with respondents of 26.6 % (17), 23.4 % (15), 32.8 % (21) and 17.2 % (11) respectively. From this it can be generalized that the misused loan affects the business of the group strongly bad by the respondents of 32.8 % (21) among the respondents. When the group member's business affected by the misuse of the loan they

borrowed, the effectiveness of group lending and its impact on profitability decreased immediately.

The group member who misused loan pay their credit by themselves and sometimes the whole group member pay the credit when member totally enable to pay his/her credit. This is because the other group member worried about the effectiveness of the group lending and its impact on profitability as well as the group members put the reasons why they pay their credits, Because, he/she highly value the future access of loans from the program, Because he/she wants to settle his /her debt, Because he/she wants to fulfill his/her moral obligation towards the group and Because he/she wants to stay on good terms with other group member with the account of 17(26.56%), 20 (31.25%), 11 (17.19%) and 16 (25%) respectively.

Therefore it can be concluded that the group member pay their loan because of settle his/her debt he/she got from the OCSSCO. In directly this influence the group to be effective and has impact on profitability of the group member. With the regard of loan size the group member got the loan amount 2000 birr averagely with the respondent of 66.5% (135) of the group member got loan between 800 birr to 2000 birr averagely, and the other of them got between 2100 birr to 3400 birr averagely and more than 3500 birr with the account of 30.05 %(61) and 3.45% (7) of the respondents respectively. So the group member got small amount of loan that is between 800 birr to 2000 birr that enable them to pay their credit and to be effective and has impact on profitability of the group. The group member strongly disagree with the respondents of 104 (51%) as the loan increase the group member continuing together in their group and 58 (29.1%), 24 (12%) and 17 (7.9%) of the respondents are disagree, agree and highly agree as the loan increase the group member is continuing together in their group respectively. Then the group member did not continuing together as the loan amount increases from OCSSCO to the group, this is because the group member that got high amount of loan want to activate his/her own business rather than with the group members.

*The managers of the OCSSCO at woreds told that the group that borrowed less money are effective than those who borrowed high amount of money. This is in case of paying their default and got again the loan from the institution that is from OCSSCO. So the institution gives the less*



*amount loans to group member to control the group member credit default and made the group effective and has impact on profitability.*

#### **4.2 Impact of group lending on profitability**

In this study when the researcher talks about group lending impact on profitability, it is tried to talk about the group member's profit under their group formed and got loan from the OCSSCO of Jimma zone of oromiya. That is changes in the group member's life style under his /her group formed and loan gained from the OCSSCO.

**Table 4.6 shows the impact of group lending under group and got loan.**

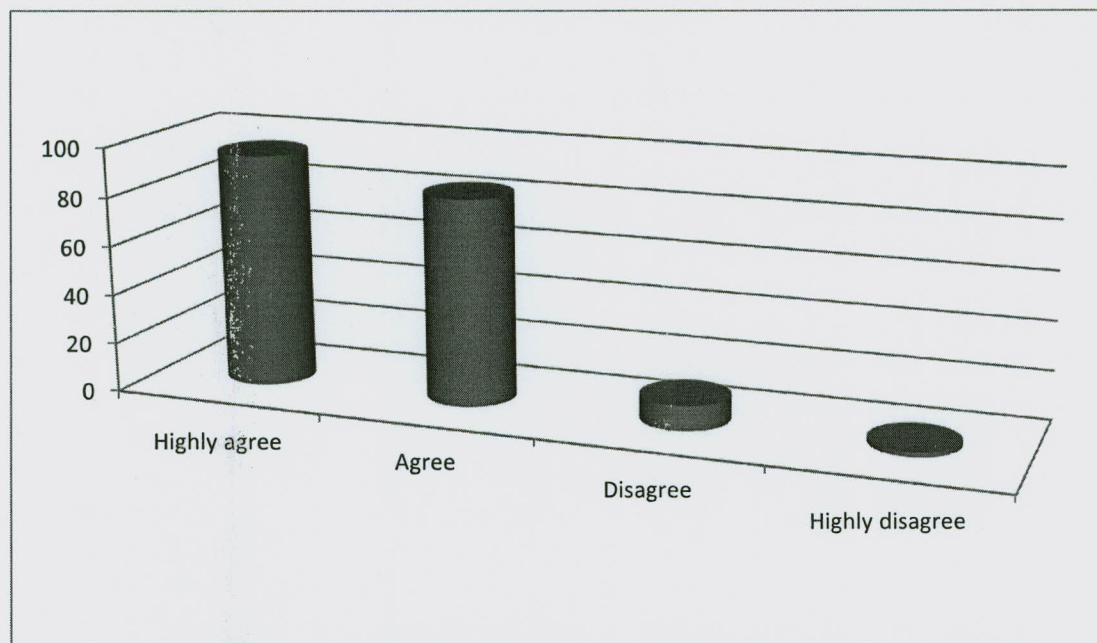
Items	Yes	No	Total
Do you have profit under the group formed and got loan.	191(94.1%)	12(5.9%)	203(100%)

Source: - survey of (2014)

As can be depicted from the above table the respondents said that they have profit under the formed (joined) group and borrowed money from OCSSCO of Jimma zone, with the count of 94.1% (191) of the respondents of the survey held at OCSSCO of Jimma zone. While the rest of the respondents with 12 (5.9%) said that they are not profited under the group and lend money from the OCSSCO. The groups that are not profited from their group are because their group is in effective and does not impact on profitability. So the groups are profitable from the group formed and loan borrowed. Groups in impact on profitability are because the group cannot pay their loan borrowed from OCSSCO as reason listed in the previous section. Those groups (that is those who are benefited) from the group formed and lending have the slogan of "WLQO KOO QORICHA RAKKOO KOO!" which to mean that "MY OCSSCO TO MY PROBLEM" because those group are leave out from their problem with the help of the credit they got from OCSSCO.

*Also the managers support that the group based borrower are profitable from their group and got loan from their microfinance institution that is OCSSCO. Plus they respond that the group lending has impact on the profitability of groups in case of changing their life style in the way of sending their child to school, changing their house from thatched house to iron sheet house and changed their house furniture.*

Figure 4.2 shows that the group member sends their children to school more than the usual

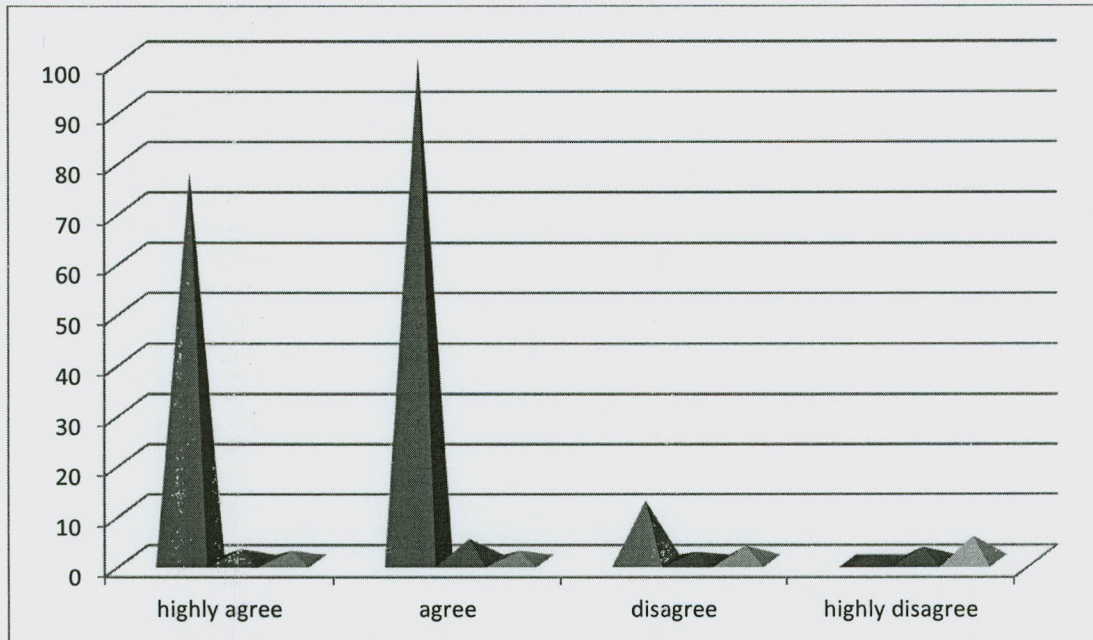


Source: - survey of study (2014)

As can be observed from figure 4.2 out of the profited group from the group lending respondents, 95 (49.74%) replied as they highly agree that they send their children to school more than they did before they formed and got loan from OCSSCO and 84 (44%) answered as they agree that they send their children to school than they send before they formed under group and lend from OCSSCO. While the rest that is 10 (5.24%) and 2(1.05%) of them said that they are disagree and highly disagree as they did not send their children to school more than they are sending their children to the school before they form group and got credit from OCSSCO. So the group profited from their group by sending their child to the school after they are under group and got loan. Those who disagree and highly disagree is because the most of them (those who disagree and highly disagree about the benefit they got after they formed group and got loan from the OCSSCO of Jimma zone) are infant and at the beginning of activating their business.



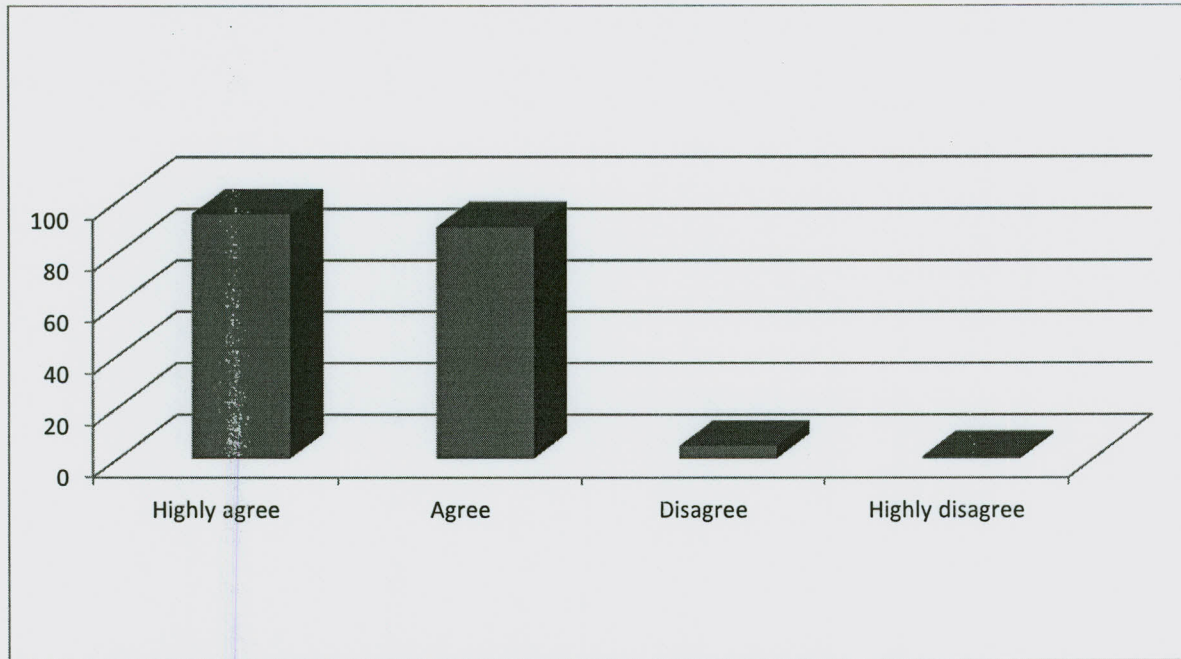
Figure 4.3 shows the group member changed their house furniture.



Source:-survey of (2014)

As can be depicted from figure 4.3 out of the profited group members from the group lending respondents, 77 (40.31%) replied as they highly agree that they changed their house furniture such as table, chair, bed and the like than they did had after they formed and got loan from OCSSCO and 100(52.36%) answered as they agree that they changed their house furniture such as table, chair bed and the like than they did had before than they do had after they formed under group and lend from OCSSCO. While the rest that is 12 (6.28%) and 1(0.52%) of them said that they are disagree and highly disagree respectively as they did not changed their furniture such as table, chair, bed and the like more than they had before they formed the group the group and got the loan with their group members from OCSSCO. From this the group member got profit by changing their house furniture under the group they formed and got loan. The group member those disagree/highly disagree is because the most of them (those who disagree and highly disagree about the benefit they got after they formed group and got loan from the OCSSO of Jimma zone) are infant and at the beginning of activating their business.

Figure 4.4 shows the group member changed their house from thatched to iron sheet.

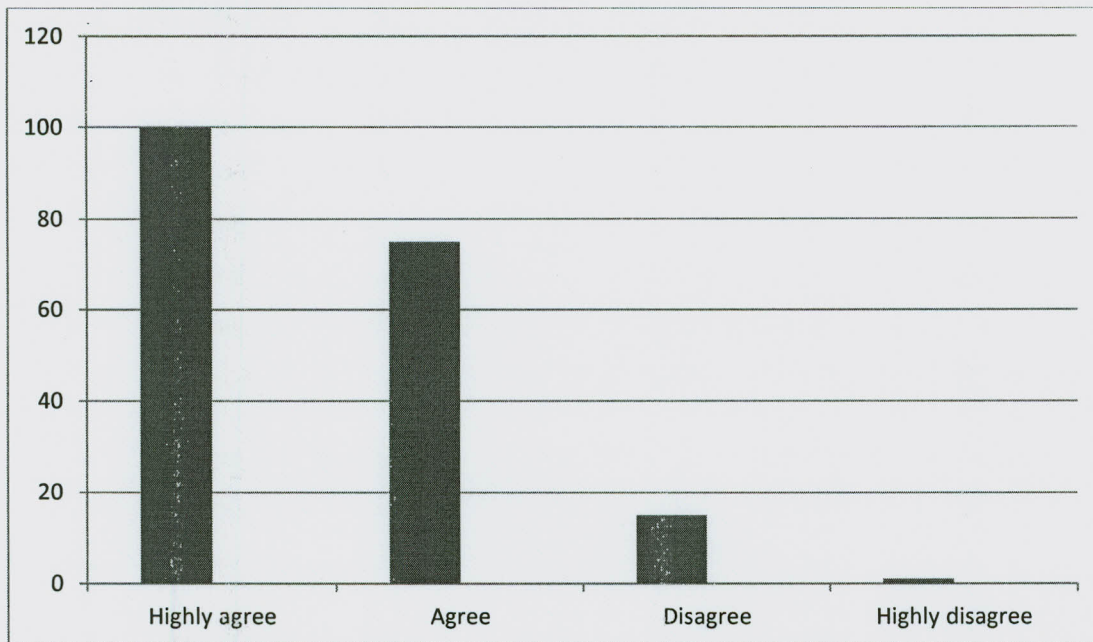


Source: - survey of (2014)

As can be looked from figure 4.4 out of the profited group from the group lending respondents, 95 (48.77%) replied as they highly agree that they changing their house from thatched house to iron sheet (tin) after they formed group and got loan from the OCSSCO and 90(46.31%) answered as they agree that they changed their house from thatched house to iron sheet (tin) after they formed group and got loan from the OCSSCO. It can be said that the group members are profitable with the change of their house from thatch to iron sheet. While the rest that is 6 (4.93%), and 1(0.5%) of them said that they are disagree and highly disagree as they did not changed their house from thatched house to iron sheet (tin) after they formed group and got loan from the OCSSCO. This is because the most of them (those who disagree and highly disagree about the benefit they got after they formed group and got loan from the OCSSO of jimma zone) are infant and at the beginning of activating their business.



Figure 4.5 shows the group member going health service more than before.



Source: - survey of (2014)

As can be observed from figure 4.5 out of the profited group from the group lending respondents, 100 (53.69%) replied as they highly agree that they going to healthy service after they formed under group and got loan from OCSSCO than before they formed the group and got loan with the group member and 75 (38.42%) said as they agree that they going to healthy service after they join under group and got loan from OCSSCO of Jimma zone of Oromia than they did not grouped and did not got loan from OCSSCO. While the remaining that is 15 (7.39%) and 1(0.5%) of them said that they are disagree and highly disagree as they did not going to healthy service after they formed under group than they used furniture such as table, chair, bed and the others before they form group and got credit from OCSSCO. This is because the most of them (those who disagree and highly disagree about the benefit they got after they formed group and got loan from the OCSSCO of Jimma zone) are infant and at the beginning of activating their business. Then the group members are profited by going to health service under the group they formed and got loan from OCSSCO of Jimma zone.

### **4.3 Econometric regression analysis**

The model contains one dependent variable and fifteen independent variables and constant term. The binary logistic regression method is used to come up with the econometric results. For the test statistics 10% (0.1) significant level is used to reject or not to reject the null hypothesis. The first test the researcher test is 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 of the study. As these tests prove the validity of the model, the study had continued into regression analysis and hypothesis testing.

Logistic regression was used (Equation 3.4) to investigate the effectiveness of group lending and its impact on profitability among the OCSSCO borrowers. The maximum likelihood estimation technique was used. Tables 4.7 present the results of the logistic model for OCSSCO borrowers.

Table 4.7 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 & Snell R Square (R<sup>2</sup>) = 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 and its impact on profitability of OCSSCO borrowers.

#### **4.3.1 Hosmer and Lemeshow model goodness of fit**

The Hosmer-Lemeshow (HL) test for logistic regression is widely used to answer the question “How well does the model fit the data?”  $R^2$  is a measure of predictive power, that is, how well can predict the dependent variable based on the independent variables. That may be an important concern, but it doesn’t really address the question of whether the model is consistent with the data. By contrast, goodness-of-fit (GOF) tests help to decide whether the model is correctly specified or not. Hosmer and Lemeshow produce a  $p$ -value—if it’s low (below .05), the model is rejected. If it’s high, then the model passes the test (Allison, 2013). Based on the above evidence the model the researcher used is fitted with the chi-square of 4.387, degree of freedom 8 and significance level of 0.821.



#### 4.3.2 Correlation test

Correlation is a way to which two or more variables are associated with or related to each other. The matrixes are two, providing information on the degree of relationship between dependent and independents variables or independent and independent variables using Pearson correlation (Gujarati, 2004). To say there is multicollinearity problem when there is correlation between variables employed in the regression model (when the assumption that  $cov(x_1, x_2) = 0$  is violated). That is the existence of a ``perfect`` or exact linear relationship among some or all explanatory variables of a regression model (Gujarati, 1995). The intercorrelation 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 4.7 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 <sup>a</sup>	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		

\*, \*\*, 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<sup>a</sup>*

Source: - the data computation of (2014)

Where:- Ag = Age, Educ =educational level, Busty=business type, Las =land size, OTSC=other source of credit, kmbgif= knowing members before group is formed (social ties), Numgroup =number of the group (group size), Gen =gender, sgmbtf =screening the group,



*rulecond=internal rule and conduct, viseot=visiting each other (peer pressure), Crovgr= credit officer visit/pressure, dis= distance, training=training and Familysize= Family size.*

Four variables were found to be positive and statistically insignificant and these include age, gender of the group member, visiting each other and training. The insignificance of the variable age of the group member is rather surprising this is because the group members that borrowed the loan from OCSSCO are around the same area that is, as the study the majority of the borrower are between 29 years -39 years.

### **Educational level (Educ)**

The variable educational level of the respondents is positive and significant at 10% level of significance on the effectiveness of group lending and its impact on profitability. This show that the probability of the effectiveness of group lending and its impact on profitability is 0.517 units times than when the group member is educated than 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 support to the 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. These faculties are hoped to reduce borrowers' delinquency. That show the group lending is effective and it has impact on profitability. But surprisingly okurut *et.al*, (2009) result shows that educational level is insignificant variable that did not determine the loan repayment of the group, which is the most influential variable for the effectiveness of group lending and its impact on profitability.

### **Training (training)**

*The managers of the woredas branch told a group interested in lending from OCSSCO must participate in some training in order to know OCSSCO and loan operation for 3 days to 6 days. Training time was measured by amount of time (in days) that the OCSSCO dedicated to training group members on issues like loan management, group membership, screen the group member and basic record keeping. This variable had a positive and insignificant effect on the probability of effectiveness of group lending and its impact on profitability. The perception of this is that increasing the capability of groups in terms of selection of group members, how to*

undertaking into a business and bookkeeping increases a capacity by group members to manage their finances properly and then promote the effectiveness of the group lending and its impact on profitability. But because of the training is given for short period of time that is for 3 days to 6 days and for primary school educated group member those who do not have hint about bookkeeping and loan management the training is insignificant variable in this study. In opposite to the findings okurut *et.al* (2009) state that this variable had a positive and significant effect at 10% significance level on the probability of loan repayment which show the effectiveness of group lending and its impact on profitability. That means if the group member pay their loan timely the effectiveness of group lending and its impact on profitability is high and vice versa if not.

### **Group Size /Number of group (Numgroup)**

The variable group size /number of group have positive and significant influence on the effectiveness of the group lending and its impact on profitability at significance level of 1%. The logistic regression showed that as the number of the group increased by one unit the effectiveness of group lending and its impact on profitability did not changed by any units. This result implied that the maximum number of the group is higher than those which have less number of group member for the effectiveness of group lending and its impact on profitability. The impact of many numbers of group size /number of group on the effectiveness group lending and its impact on profitability are 0.002 times than those of less group size. The same result was stated by 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% significance level) on loan repayment performance, in addition to this Bastelaer and Leathers (2006) result implied that with bigger groups, monitoring and evaluation within groups becomes increasingly costly and difficult. This describes that smaller groups hold advantage in tie together information, collective action and diminish implementation challenges which result into higher repayment rates. From this it is easy to say that the effectiveness of group lending and its impact is highly influenced by the group size of the borrower.

### **Screening (sgmbt!)**

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Screening the group before the group is formed has a positive and significant influence on effectiveness of group lending and its impact on profitability at 5 % level of significance. This implied that the effectiveness of group lending and its impact on profitability is higher when the group member screening 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 & not and who worry about their credit. Because the group member who differentiated through this struggle for their group effectiveness and its profitability. The logit model indicates that as the screening of the group increased by one unit the effectiveness of the group lending and its impact on profitability is also adding by 6.620 units. These show that the screening and effectiveness of group lending and its impact on profitability are directly related to each other. It shows that the dependent and independent variable have positive relationship. The influence of screening the member of the group before the formation is 750.221 times higher than the groups did not held on the screening of group members before the formation. In opposite to this study Sharma and Zeller (1996) show 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. From their analysis, it can be concluded that when the group is relatives there is no screening and the effectiveness of group lending and its impact on profitability become ineffective.

### **Social ties (kmbgif)**

The extent of social ties and the manner in which they are used support different views on the impact of social ties in effectiveness of group lending and its impact on profitability.

Results on the effect of social ties on repayment are in line with Zeller (1998), and Karlan (2007) since their result is the sign of the effectiveness of group lending and its impact on profitability. 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 and its impact on profitability. Habteabe (2005) describe that social ties and connection among members play a role in facilitating the screening process that is the influential in the effectiveness of group lending and its impact on profitability. Besley and Coate (1995) argues that if social sanctions are not sufficiently strong ,group lending may encourage default by members who would have

repaid under lending. That means, if social sanction is strong, group lending can improve repayment rates by encouraging borrowers to help each other. Also Zeller (1996) show that socially unified groups pool risks by misusing the members' asset that their repayment performance is improved even in communities with high-risk exposure. Plus (Postelnicu 2012) state that the 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. Which shows the effectiveness of group lending and its impact on profitability of the group based borrower of OCSSCO of Jimma zone. Knowing the group member is having friend ship and social ties among the group member before the group is formed. At this moment the group's member differentiates the group deeply in all cases. This controlling variable has a positive and significant influence on the effectiveness of group lending and its impact on profitability at 5 % of significance level. The effectiveness of group lending and its impact on profitability is increased by 0.026 units when the group member know each other before formation of the group than, the group is not knowing each other before the group formation.

#### **Other source of credit (OTSC)**

The variable other source of credit 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 and its impact on profitability is increased. The logit model indicates that as other source of credit to the group increases by one unit the effectiveness of group lending and its impact on profitability decreases by 4.019 units. This is the same result (positive) as hypothesized by the researcher. 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. In support to this finding, Paxton (1996) if someone has too many other debt contracts, then they may pay back the informal loans to friends or to informal lending groups before they repay to their formal group. This can determine the group lending is ineffective and its impact on profitability or not.

#### **Family size (Familysize)**



Family size is positive and statistically significant at 1% of significance level on the effectiveness of group lending and its impact on profitability. From the logistic regression, it can be concluded that the family size can influence the effectiveness of group lending and its impact on profitability in undetermined direction. In opposite to this result Abreham (2002) resulted household size found to be insignificant variable and got positive signs.

#### **Internal rule and conduct (rulecond)**

The internal rule and conduct variable has positive and significant impact on effectiveness of group lending and its impact on profitability at 1% level of significance. This implies that the effectiveness of group lending and its impact on profitability 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 and its impact on profitability is increased by 10.842 units. Internal rule and conduct imposes the effectiveness of the group lending and its impact on profitability by 5.111 times than those groups with no internal rule and conducts. The same to this (Vigenina *et.al* 2004) state that the groups of lower risk have internal rules that are stricter than the rules followed by the borrowers from higher risk groups. Monitoring indicates the frequency of meetings between group members. Also, the study of Bassem (2008) showed that the repayment is influenced positively by the internal rule of conduct, which most importantly influenced the effectiveness of group lending and its impact on profitability. Also Godquin (2004) described access to multiple loans not only tempts women into engaging in high risk economic activities but also reduces their incentives to ensure business success and loan repayment that show the unsuccessfulness of the group and that impose negatively on the effect of group lending on profitability . Based on this evidences the internal rule and conduct play a great role in the effectiveness of group lending and its impact on profitability of the OCSSCO of Jimma zone.

#### **Gender (Gen)**

The Gender variable is statistically insignificant. That indicated the effectiveness of group lending and its impact on profitability of OCSSCO borrower was never based on the gender is males or females. In opposite to hypothesized, the gender of the borrower does not influence the group lending and its impact on profitability. In support the finding (Godquin 2004) showed that

Sex did not prove to have a significantly better repayment performance which is the indicator of group lending effectiveness and its impact on profitability. Even though the coefficient is positive, it is not significant. The results cannot justify the priority given to women in microfinance programs based on better repayment performance of women as is sometime done the official description of the effectiveness of the group and it has the direct effect on the profitability of the group. In support to this okurut *et.al* (2009) state that gender of the group leader is insignificance of the variable. Opposing to the finding and (Godquin, 2004) Paxton (1996) state that the significant positive sign on the Gender variable indicated that the probability of a loan repayment problem was higher for males than for females this indicate that the group lending is more ineffective and less impact on profitability when the group lender is male than females.

#### **Peer pressure /visiting each other (vieot)**

The group pressure have positive signs and insignificant explanatory power on the effectiveness of group lending and its impact on profitability indicating the importance of this variable in alleviating moral hazards, the main implication of it. This is because the group members visit each other and discuss on all things. When they meet each other regularly the adaptation of the behavior of each other can increase and they neglect the idea of each other. Even though they believe that their visiting each other help their group to be effective and has impact on profitability peer pressure is insignificant to it. In despite to this the group member put pressure on the group member when he/she does not pay his/her credit. The pressures are morale persuasion, harassing, village talk and exclusion from social activities when he/she totally refuse not to pay the credit. The group member feel very angry if their colleagues default because he/she pay the credit defaulted by the group member. Opposing results were found by Wydick (1999) and Karlan (2007). The results show that a greater degree of pressure among group members reduces the number of days of late repayment the sign of the effectiveness of group lending and its impact on profitability while the effectiveness group lending and its impact on profitability is measured in case of repay ability in other way. The probability of the effectiveness of group lending and its impact on profitability problems decreases since the more the group members exchange visits between them, the more the opportunity to control their behaviors will be raised to the effectiveness of group lending and its impact on profitability.



### **Land size (Las)**

Land size is the amount of land owned by each group members. In this study the land owned by group members was 0.5 hectare as a minimum and 8 hectares as a maximum. The logistic model show that land size variable has positive and significant on the effectiveness of group lending and its impact on profitability at 10% of significance level. This implied that as the land size of the group member increase by one unit the effectiveness of group lending and its impact on profitability increase by 0.586 units. The High land size owned by group borrower has impact on effectiveness of group lending and its impact on profitability than when the group borrower has less land size by 1.816 units. In opposite to this Al-azzam *et.al* (2012) result shows that the variable land has negative sign but statistically insignificant. The same to this result obtained by Zeller (1998) state that Land ownership as a measure of wealth seems to be unimportant factor in determining repayment behavior. Since it shows that the effectiveness of group lending and its impact on profitability, it can be recognized from their result the land size owned by the group member did not influence it.

### **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 and its impact on profitability of the group. Mokhtar *et.al* (2010) stated that a borrower whose business was in agriculture will have a loan repayment problem. This is opposite to the findings in the study that loan repayment problem is the sign of ineffectiveness of group lending and its impact on profitability. 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 credit officer visit the lend group per a month during going to collect the credit from the group member. In addition to this

the credit officer taught them how to save, how to manage their loan and how to repay their credit. The model showed that the variable credit officer visit had a positive and significant influence on the effectiveness of group lending and its impact on profitability at significance level of 10%. The effectiveness of group lending and its impact on profitability is negatively related to the credit officer visit/staff pressure. This is as the credit officer highly visits the group member time from time the effectiveness of group lending and its impact on profitability is decreased by 8.165 units. This is 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. The effectiveness of group lending and its impact on profitability did not changed when the credit officer visit/staff pressure is high or were not high.

### **Distance (dis)**

Distance is a community-level variable computed as the mean distance from the village to micro finance institution service. The variable distance measure how the group members far from each other in their kebele. The main distance between the group members is 0.5 km at the minimum to 6 km at maximum in 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 positive and significant influence on the effectiveness of group lending and its impact on profitability at significance level of 1%. Distance negatively related with effectiveness of group lending and its impact on profitability. This shows that as the distance between the group member's increase by one unit the effectiveness of the group lending and its impact on profitability decrease by 3.67 units. The effectiveness of group lending and its impact on profitability is higher when the distance between the members is less than when it is long by 0.02 units. Sharma *et.al* (1997) in case of the distance observed that repayment rates of group-based systems are especially good in relatively remote communities. This is directly related to the effectiveness of group lending and its impact on profitability that means the group lending is effective and increases the profitability of the group. Because when the group is nearest to each other they put pressure to work their business in well manner. In opposite to this the findings of Wydick (1999) suggest that the distance between borrowers' businesses is also negatively correlated to repayment performance in rural areas. This shows that the group is ineffective and has negative impact on profitability of the group.



## CHAPTER FIVE

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 CONCLUSIONS

The 4<sup>th</sup> chapter of the study contains the data analysis and the findings of the study. In this chapter the major findings of the study are concluded and recommended based on the findings and are forwarded for the concerned bodies.

The nature of this research is descriptive type and econometric model analysis that incorporates fact finding inquiries and surveys with regard to the effectiveness of group lending and its impact on profitability in Jimma Zone OCSSCO. The main objective of this research is to assess and analyze the effectiveness of group lending and its impact on profitability at Jimma zone OCSSCO. This may give some possible insights to micro finance institution related policy makers to give closer attention towards tackling the problems raised in association with the effectiveness of group lending and its impact on profitability by providing appropriate suggestions. The collected data from each selected group of the OCSSCO microfinance borrower officers found in Jimma Zone were filtered, categorized and proceeded using descriptive statistics econometric model by employing SPSS (Statistical Package for Social Scientists) version -16 windows software.

Descriptive analysis results revealed that the loan did not misused was about 139(68.5%). It indicates that the group based borrower did misused the loan borrowed is approximately 64(31.5%). Although it was that the misused loan affects the business of the group members business strongly badly that is 32.8 % (21). This means that the group based borrower used the borrowed money to other purpose such as personal consumption, buy the students uniform and pay some other credit they got from their friends and other source of credits. When the group member's business affected by the misuse of the loan they borrowed, the effectiveness of group lending and its impact on profitability decreased immediately. The group member who misused loan pay their credit by themselves and sometimes the whole group member pay the credit when member totally enable to pay his/her credit. And also most of the group based have profit after they are formed (joining) the group and borrowed money from OCSSCO of Jimma zone, with

the count of 94.1% (191) of the respondents of the survey held at OCSSCO of Jimma zone. This indicates that almost all of the group based lenders are profitable from the money they borrowed from OCSSCO. From this angle, those groups (that is those who are benefited) from the group formed and lending have the slogan of “WLQO KOO QORICHA RAKKOO KOO!” which to mean that “MY OCSSCO TO MY PROBLEM” because those group are leave out from their problem with the help of the credit they got from OCSSCO. The group members that have had profit send their child to school, changed their house furniture, changed their house from thatched to iron sheet and go healthy center more than usual they are going with the account of 50.25%, 49.26%, 48.77% and 53.69% respectively. This shows that the group lending is effective and has impact on profitability.

Most of the group members' those who got loan from OCSSCO are the married and lived in the same area for long period of time presents 73.9% and 35.5% of the total of the respondents of the study. These show that there is effectiveness of group lending and its impact on profitability because the married people worried about their family life style and they know about each other in all cases. Majority of the group is formed with the initiation of the group member themselves that counts 60.6% this show that since the group is formed with the initiation of themselves the effectiveness of group lending and its impact on profitability is high. The groups that are formed did not have the experience of participating in group activities. From this it can be recognized that the non-experienced group did not know how to manage their group members and pay their credit properly which bring the ineffectiveness of group lending and its impact on profitability. And the majority of the group member never applied for loan because the respondents never consider that they can get loan from other that is banks and other institution because they think that they cannot get loan from them for the reason of the group borrowers do have a loan of OCSSCO of Jimma zone. Some of the group members are refused because of they do not have enough collateral, do not know as they can get from banks & other lending institutions and there is no consignor. From this point of view the effectiveness of group lending and its impact on profitability was increased because the group member was only credible to the OCSSCO's credit.

With regard to credit default as an effectiveness of group lending and its impact on profitability measure for the study, Educational level, Business type, Land size, Other source of credit, Social



ties, Number of group/group size, Rule and conduct, Credit officer visit/pressure, Distance and family size has a positive and significant impact on the effectiveness of group lending and its impact on profitability. Against the hypothesis one the regression analysis result indicated that the female is effective and has impact on profitability. This means that the groups which are females are more effective in group lending and its impact on profitability than more males' group members. 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 and its impact on profitability can increased. This show that as the group members strives for the survival of his/her family life he/she also contribute for the effectiveness of group lending and its impact on profitability. In opposite to the above explanatory variables the variables such as Age, Gender, Visiting each other/peer pressure and training have positive sign and insignificant influence on the effectiveness of group lending and its impact on profitability.

## **5.2 RECOMMENDATIONS**

- The OCSSCO should give attention to the group member that are formed from educated people because the group can understand the training given them to manage their credit, pay their credit and can save the money they got that determine the effectiveness of group lending and its impact on profitability.
- OCSSCO should embark into greater coordination amongst themselves to restrain the problem of other source of credit among clients which enhances loan default. The policy option is for OCSSCO to collaborate in the creation of a credit reference for all their clients.
- The OCSSCO need to undertake periodic reviews of the factors that cause clients to misuse of their credit with a view to addressing those that are attributed to OCSSCO's effectiveness of group lending and its impact on profitability for OCSSCO group based borrower.
- The OCSSCO of Jimma zone should follow the borrower those who misused the loan they borrowed from it in the way of giving training how the group member manage their credit and how implement their business with respect to the amount of the money they

borrow. And the credit officer of OCSSCO should pave the way how to save and encourage saving money from what they get and disburse properly the loan to group members also the credit officer should tell group members as they misused their business is badly affected.

- 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 ekub 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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**Website**

[http://en.wikipedia.org/wiki/Jimma\\_jan,2014](http://en.wikipedia.org/wiki/Jimma_jan,2014)



# APPENDIXES

**Appendix 1**  
**Jimma University**  
**College Of Business and Economics**  
**School Of Graduate Studies**  
**MSC Program in Accounting and Finance**

**Questionnaires**

Dear respondents:

You are being asked to participate in a survey that intends to assess the effectiveness of group lending and its impact on profitability in OCSSCO at jimma zone. This study is conducted in partial fulfillment of the requirements for master's Degree in Accounting and Finance by Ato Endalew Gutu. This is survey questionnaire which is aimed at identifying and collecting data about the effectiveness of group lending and its impact on profitability in OCSSCO Jimma Zone. Your response to these questions has a paramount importance to complete the study, confidential and won't be used in any form for another purpose.

I respectfully request your kind cooperation in answering the questions that follow a clearly and frankly as possible and your response will be highly confidential.

Thank you in advance for your kind cooperation

If you have any question, you any contact the researcher by the following addresses:

Mobile: - 09-13-759922 or

Email address:-endgut70@yahoo.com



Select one of the answers from the given choice or write it as required.

**Demographic status of the respondents**

- 1) Sex A) Male B) Female
- 2) Age: A) 18-29 years B) 30-40 years C) 41-50 years D) above 51
- 3) Marital status  
A) Single B) Married C) Divorced D) Widowed
- 4) What is the level of your education? \_\_\_\_\_ grade.

**Types of business**

- 5) What is your principal type of business?  
A) Agriculture B) Services C) Trading D) Manufacturing
- 6) If your answer is "A" or agriculture how much is your land?  
\_\_\_\_\_ in hectares.
- 7) Based on question number six does it affect your paying ability to the borrowed money from the institution?  
A) Yes B) No
- 8) As your answer of question number "7" please give the reason.  
\_\_\_\_\_  
\_\_\_\_\_

**Other sources**

- 9) Do you have other sources of credit?  
A) Yes B) No
- 10) If the answer to question "9" is "yes" Which of the following are your sources?  
A) Local traders/suppliers B) local Moneylenders C) Banks D) Relatives/friends  
E) Other \_\_\_\_\_
- 11) Has any bank or some other lending institution ever refused you a loan?  
A) Yes B) No C) Never applied
- 12) If your answer to question No 11 is "No", please give the reason among the given.  
A) Lack of collateral B) No consignor C) Do not know D) Other reasons

**Solidarity**

13) Have you had problems repaying your debt in the current loan cycle?

A) Yes B) No C) I do not remember

14) If your answer to question 13 is yes, please what is the reason?

A) Natural disaster B) Profit loss C) Illness of family member D) Death of family member  
E) Competition was tough

15) If your answer to question 13 is no, please list the reason

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16) How many times did this happen if your answer is "yes" for question 13?  
\_\_\_\_\_ times.

17) Do you have help from your group members to pay your credit?

A) Yes B) No

18) If your answer to question 17 is "yes" how many of them helped you?  
\_\_\_\_\_ of them.

19) If your answer to question 17 is "No" what is the reason?

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**Value the future loan access**

20) How do you value future (subsequent) access of a loan from the lending program?

A) Very high B) High C) Moderate D) Little E) Not at all

21) If your answer to question 20 is "Little or Not at all" please what is the reason?

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22) How many times has your group received a loan from the program? \_\_\_\_\_ times

**Social ties**

23) How long have you lived in this village/town? For \_\_\_\_\_ years.

24) Have you ever participated in another group? A) Yes B) No

25) If your answer to question No 24 is "yes" why you leave that group?

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26) How well did you know the members before you formed this group?

A) Good B) Hardly C) not at all

27) If you did not know your fellow group member did not know him/her at all, why did you accept him/her as a member in the group?

A) He/she is a friend of another member B) His/her business looks good C) He/she is a relative of another member

28) Who initiated the group formation?

A) Members themselves B) Group leaders C) Credit officer

**Homogeneity**

29) How many members does your group have? \_\_\_\_\_

30) Does the size of your group affect the effectiveness of the group?

A) Yes B) No

31) Based on your answer for question number 30 in what manner it affects?

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32) What is the gender of the group members?

A) Female B) Male C) It includes both sexes

33) Based on your answer for question No 32 when your group is good to pay its credit?

A) When the member is only female B) When the member is only male C) When it has both sex

34) What is the reason for your answer to question No 33?

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35) Did you know about the behavioral integrity of all potential group members before the formation of your group?

A) Yes B) No

36) Do you screen the group member before forming the group?

A) Yes B) No

37) If your answer to question No 36 is yes, whom do you ask for more information?

A) Neighbors B) Friends C) Relatives D) Money lenders

38) If your answer to question 36 is yes, what information do you seek from the above individuals?

- A) About what does he/she do for a living? B) About how his/her business (farm) doing?  
 C) About his/her creditworthy D) About he/she is a hard worker
- 39) Do you have internal group agreements and rules of conduct?  
 A) Yes B) No
- 40) If your answer to question No 39 is "Yes" what kind of rules? A) Written B) Verbal
- 41) How do you agree that the existence of the agreement or rule help your group to be effective?  
 A) Strongly agree B) Agree C) Disagree D) Strongly Dis agree

**Peer pressure**

- 42) Do you visit each other at the business or at home regularly?  
 A) Yes B) No
- 43) If your answer to question No 42 is "yes" how often do you visit each other?  
 A) Daily B) Once a week C) per two week D) per a month
- 44) Does your visiting each other help your group to be success?  
 A) Yes B) No C) I don't know
- 45) Do you put a pressure on a group member who does not pay his/her credit? A) Yes B) No
- 46) If your answer to question No 45 is "yes" What form of pressure does your group use against defaulting member to repay his/her dues?  
 A) Moral persuasion B) Village talk C) Harassing D) Exclusion from social activities
- 47) How do you feel if a group member defaults?  
 A) Very angry B) Neutral C) Kindly
- 48) If your answer to question No 47 is "very angry" why you angry? Please give your reason.

- 
- 49) Do you penalize a member defaulting? A) Yes B) No
- 50) If you say "yes" to No 49 What form of penalty would the group impose against a defaulting member?  
 A) He/she will be denied following loans B) He/she will have to leave the group  
 C) He/she will be reported to the village leaders or administrators  
 D) He/she will be reported to the credit officer E) He/she will lose his/her assets

**Loan officer visit or pressure**



51) Does a credit officer visit your group? A) Yes B) No C) I have not seen

52) If your answer is "Yes" to question No 51 how often does the credit officer visit you?

A) Once a week B) per a two week C) per a month D) Once per every three months

53) If your answer is "Yes" to question No 51 how do you agree it help your group to be effective or success?

A) I highly agree B) I agree C) I disagree D) I highly disagree

#### **Loan diversification**

54) Has any one member of your group misused loans? A) Yes B) No

55) If your answer to question No 54 is "yes" how it affect your group business?

A) Badly B) somewhat bad C) Strongly Bad D) Not at all

56) If your answer to question No 54 is "yes" who repay the loan?

A) The member him/herself B) The group leader C) The hole group member

57) Why do you repay your loans?

A) Because you want to stay on good terms with the group

B) Because you want to fulfill your moral obligation towards the group

C) Because you highly value future access to loans from the program

D) Because you want to settle your debt

#### **Loan size**

58) How many birr do you get from the institution at the beginning of your loan? \_\_\_\_\_ birr.

59) How do you agree as the loan increase the group member is continuing together in their group?

A) Strongly agree B) Agree C) Dis agree D) strongly disagree

60) If your answer is strongly disagree please what is the reason?

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#### **Relationship**

61) Does your group is composed of different families?

A) Yes B) No C) I don't know the composition

62) If your answer to question 61 is no from which of the following is your composition?

A) Only from the same family B) From neighbor but different family C) From both family and neighbor

63) Give the composition of the group which is used the group to be effective. \_\_\_\_\_

**Training**

64) Do you get training during you are made group to borrow from the institution?

A) Yes B) No C) I do not remember it

65) If your answer to No 64 is "yes" for how many days? \_\_\_\_\_ Days.

66) How much is the distance between your groups member? \_\_\_\_\_ km averagely.

67) Does the distance between your group members affect your group? A) Yes B) No

68) If your answer to question No 67 is yes how it affect the group?  
\_\_\_\_\_  
\_\_\_\_\_

69) Number of oxen owned by the group member \_\_\_\_\_ (in number).

70) Based question on number 69 how it affects the groups' effectiveness?

A) Very highly B) Highly C) Low D) Very low

71) What is the group members' Family size? \_\_\_\_\_ (in number).

72) How the family size affects the groups paying ability that has the effects on group's effectiveness? A) Very highly B) Highly C) Low D) Very low

73) Do you get any benefit after you joined the group? A) Yes B) No

74) Please put your degree of agree in front of the following services

Changes in	Highly agree	Agree	Dis agree	Highly disagree
Increase sending children to school				
Increase going healthy service				
Changing the house roof from grass to steel				
Changing the house furniture				

75) Please give the ideas that used to continue group lending effectiveness or improve its effectiveness.  
\_\_\_\_\_  
\_\_\_\_\_



THANKYOU!

**Appendix 2**  
**Universitii Jimmaa**

**Kolleejji Barnoota Sadarkaa Digirii lamaffaa**

**Garee Bizinasii fi Ikonomiksii**

**Sagantaa Digirii Lamaffa akkawuntingii fi Fayinansii**

**Gaffilee**

Kabajamoo Deebii deebisaa:

Isin mataa duree qorannoo “Assessing the effectiveness of Group lending and its impact on profitability” ykn Bu’a qabeessumma gareen liqeffachuu fi dhiibbaa inni bu’aa irratti qabu. Qorannoon kun kan rawwatu Obbo Indaalloo Guutuu dhaan , sabaaba Digirii lamaffaa gosa barnoota “Accounting and Finance” tiin Xumursisu danda’udhaaf. Kaayyoon Gaaffiilee Qorannoo kanaa waa’ee Bu’a qabeessumma gareen liqeffachuu fi dhiibbaa inni bu’aa irratti qabu Waajjira liqqii fi qusannaa oromiyaa dame godina jimmaa adda basuu fi Dataa funaanu dha. Deebiin keessan qorannoo kana xumursisuudhaaf faayidaa gudda qaba,Icciiittiin isa eegama fi faayida biroof hin olu.

Kanaaf,gaaffii kana hordofuun haala garii fi karaa danda’ammuun waan naaf ibsitaniif galaata guddaa qabdu.

Waan na gargaartaniif dursa galatoomaa.

Yoo gaaffii qabdu tataan teessoo armaan gadiin na argachuu dandeessu.

Lakk.bil.09-13-759922 ykn

Email: endgut70@gmail.com

**Gaaffilee aarmaan gadiif deebii sirrii ta'a jettee kan itti amantu filadhu.**

**Haala dhuunfaa**

1) Saala A) Dhiira B) Dhalaa

2) Umurii waggaa A) Waggaa 19-29 B) Waggaa 30-40 C) waggaa 41-50 D) Waggaa 51 ol

3) Haala jireenya keessanii

A) Kan qofaa jiraatu B) Kan fuudheeru C) Kan hiikeeru D) Qeerroo

4) Sadarkaa barnootaa keessanii. Kutaa \_\_\_\_\_

**Gosa hojii keessanii**

5) Gosti hojii keessanii inni guddaan maali?

A) Qonnaa B) Tajaajila C) Daldala D) Oomisha

6) Yoo deebiin keessaan "A" ykn qonnaa ta'e bal'inni lafa keessanii hammami?

\_\_\_\_\_ hektaaraan.

7) Gaaffii 6<sup>ffaa</sup> irratti hundaa'aatii dandeettii kaffaltii keessanirrattii (qarshii WLQO irraa liqeeffattanirrattii) dhiibbaa qabaa? A) Eeyyee B) Lakki

8) Haala deebii kee gaaffii "7" irratti hundaa'iitii, maaloo sababa isaa ibsi.

\_\_\_\_\_  
\_\_\_\_\_



### Madda liqii biraa

- 9) Madda liqii biraa qabduu? A) Eeyyee B) Lakki
- 10) Yoo deebiin kee gaaffii 9<sup>ffaa</sup> “eeyyee” ta’e kanneen aarmaan gadii keessaa isa kam irraatii?  
A) Daldaltoota irraa B) Namoota naannoo liqii liqeessan irraa C) Baankii D) Fira/hiriyyaa  
E) Kan biroo \_\_\_\_\_
- 11) Manni baankii ykn dhaabbanni biroon sinii liqeessuu didaniiruu?  
A) Eeyyee B) Lakki C) Hin iyyanne/hin gaafanne
- 12) Yoo deebiin kee gaaffii 11<sup>ffaa</sup> “lakki” ta’e, sababa isaa naaf ibsaamee?  
A) Waanan qabsiisu dhabeen B) Hin beeku C) Sababiibiroo  
\_\_\_\_\_

### Tokkummaa

- 13) Liqii liqeeffattan kanfaluuf rakkinni sin quunname jiraa?  
A) Eeyyee B) Lakki C) Hin yaadadhu
- 14) Yoo deebiin kee gaaffii 13<sup>ffaa</sup> Eeyyee ta’e kanneen aarmaan gadii keessaa sababii isaa filadhu. A) Balaa uumamaa B) Bu’aa dhabuu C) Dhukkubsachuu maatii D) Du’aatii maatii  
E) Dorgommiin cimaa ta’uu isaa
- 15) Yoo deebiin kee lakkofsa 13 lakkii ta’e sababni isaa maal ta’aa?  
\_\_\_\_\_  
\_\_\_\_\_
- 16) Yoo deebiin kee 13<sup>ffaa</sup> f eeyyee ta’e si’a meeqaaf si quunname? Si’a \_\_\_\_\_ f.
- 17) Liqii liqeeffattan kaffaluuf gargaarsa miseensa garee kee irraa argatteettaa?  
A) Eeyyee B) Lakki

18) Yoo deebiin kee gaaffii 17 eeyyee ta'e meeqqan isaaniitu si gargaare? \_\_\_\_\_  
isaanii.

19) Yoo gaaffii 17<sup>ffaa</sup> lakki jette ta'e sababan isaa maal ta'a jettee yaaddaa?  
\_\_\_\_\_

### **Liqii gara fulduraaf bakka kennuu**

20) Liqii gara fulduraaf hamma hammam yaaddaa?

A) Baay'een yaada B) Nan yaada C) Giddugaleessaan yaada D) Xiqqoo xiqqoon yaada E)  
homaallee hin yaadu

21) Yoo deebiin kee lakkoofsa 20 xiqqoo xiqqoo ykn homaa hin yaaduu ta'e ,maaloo sababa isaa  
naaftarreessi. \_\_\_\_\_

22) Al –meeqaaf(si'a meeqaaf) WLQO irraa gareen liqeeffattan? Si'a \_\_\_\_\_ f

### **Walitti hidhaminsa Hawwaasummaa**

23) Hammamiif ganda kana ykn magaalaa kana jiraattee? \_\_\_\_\_ f

24) Garee kanaan alatti garee biroo keessa turteettaa? A) Eeyyee B) Lakki

25) Yoo gaaffii 24<sup>ffaa</sup> eeyyee jette maaliif garee sana keessaa baate(gadhiiftee)?  
\_\_\_\_\_

26) Osoo garee kana hin ijaariin miseensa gareekee hammam isaan beektaa?

A) Sirriittiin isaan beeka B) nan beeka C) Gonkumaa isaan hin beeku

27) Yoo miseensa garee kee hin beektu ta'e, maaliif ofittii isaan dabalte?

A) Hiriyyaa miseensa gara biraa waanta'eef/teef B) Qabeenyaan isaa gaarii waan ta'ef C) Fira  
miseensa gara biraa waan ta'eef

28) Eenyutu gareen kun akka uumamuuf kakaase?



A) Miseensa garee ofuma isaanii B) Hoogganaa garichaa C) Hojjetaa liqii dhaabbatichaa

### Homogeneity

29) Gareen keessan miseensa meeqa qabaa? \_\_\_\_\_

30) Baay'inni miseensa garee keessanii bu'a qabeessummaa garee keessaniirratti dhiibbaa qabaa?

A) Eeyyee B) Lakki

31) Deebiikee gaaffii 30<sup>ffaa</sup> irrattii hundaa'uudhaan haala kamiin miidhaa?

---

32) Saalaan miseensa garee kee maalii?

A) Dhalaa B) Dhiira C) Saala lammaan isaa

33) Gareen tokkoo liqii isaa kaffaluuf yoo maal ta'e gaarii ta'a jettee yaaddaa?

A) Yeroo miseensi dhalaa qofaa ta'u B) Yeroo miseensi dhiira qofaa ta'u C) Yeroo saala lamaanuu qabaatu

34) Sababiin deebii kee lakkoofsa 33 maal ta'aa?

---

35) Osoo garee hin ijaariin dura waa'ee amala miseensa garee kee ni beektaa?

A) Eeyyee B) Lakki

36) Osoo garee hin ijaareen dura miseensa garee keessanii filattaniittuu? A) Eeyyee B) Lakki

37) Yoo deebiin kee lakkoofsa 36 eeyyee ta'e odeeffanoo waa'ee miseensichaa eenyuun gaafattaa?

A) Ollaa isaa/ishee B) Hiriyyaa isaa/ishee C) Fira isaa/ishee D) Jara qarshii liqeessan

38) Yoo deebiin kee lakkoofsa 36 eeyyee ta'e odeeffanoo waa'ee nama dhuunfaa sanaa kan akkamii gaafattuu?

A) Jireenya isaaf/isheef maal akka hojjetu/ttu B) Akkamiti hojii qonna isaa/ishee akka hojjetu/ttu

C) Waa'ee liqii isa irra jiru kaffaluu isaa/ishee D) Waa'ee cimee hojjechuu isaa/ishee

39) Walii galtee keessaa fi danbii ittiin bulmaataa qabduu? A) Eeyyee B) Lakki

40) Yoo deebiin kee gaaffii lakkoofsa 39 eeyyee ta'ebifa kamiin qabduu?

A) Barreeffamaan B) Jechaan

41) Waliigalteen ykn seerrii jiraachuun isaa gareen keessaan bu'aa qabeessa ta'uu isaaf gargaare jettee hangam walii galtaa?

A) Sirriitti waliin gala B) Waliin gala C) Walii hin galu D) Sirriitti walii hin galu

### **Dhiibbaa garee**

42) Bakka hojiitti ykn mana keessanitti wal hubattuu? A) Eeyyee B) Lakki

43) Yoo deebiin keessan gaaffii 42 eeyyee ta'e hammam wal hubattu?

A) Guyyaa guyyaan B) toorbeetti al tokko C) toorbee lamatti altokko D) Ji'aan al tokko

44) Wal hubachuun keessan gareen keessan fiixa akka bahuuf gargaareeraa?

A) Eeyyee B) Lakki C) Hin beeku

45) Miseensa garee kee idea isaa/ishee hin kaffalanne akka kaffalatuuf/ttuuf dhiibbaa irraan geessee beektaa? A) Eeyyee B) Lakki

46) Yoo deebiin kee gaaffii lakkoofsa 45f eeyyee yoo ta'e dhiibbaa gosa akkamii miseensa garee keessanii kan idaa hin kaffalanne irraan geessistuu?

A) Dhiibbaa haamilee B) Namoota naannoo himuu C) Miidhaa gama saalaan irraan gahuun D) Sochii haawaasaammaa irraa qooduu

47) Yoo miseensi garee kee liqii liqeeffatan kaffaluuf maaltu siitti dhagahama?

A) Baay'een aara B) homtuu natti hin dhaga'amu C) hiriyyumaan/gargaarsaan



48) yoo deebiin kee lakkoofsa 47 baay'een aara ta'e maaliif akka ta'ee sababa isaa ibsimee?

---

49) Miseensa garee kee kan liqii isaa/ishee hin kaffallee adabduu? A) Eeyyee B) Lakki

50) Yoo gaaffii lakkoofsa 49<sup>ffaa</sup> eeyyee jette gareen kee adabbii akkamii irratti fudhattuu?

A) Liqii irraa duubatti hambisuun B) Garee keessaa baasuu C) Bulchinsa gandaatti himachuu  
D) Hojjetaa WALQO tti gabaasuu E) Qabeenyaa isaanii irraa fudhuu

#### **Hubannaa/dhiibbaa qondaala liqii**

51) Qondaalaan liqii garee keessan hubatee/ilaalee beekaa?

A) Eeyyee B) Lakki C) Argee hin beeku

52) Yoo gaaffii 51 eeyyee jette qondaalli liqii hammamittii sin hubataa?

A) Toorbeetti al tokko B) Toorbee lamatti al tokko C) ji'atti al tokko D) Ji'a sadiitti al tokko

53) Yoo gaaffii lakkoofsa 51 eeyyee jette fixa bahinsa garee keessaniif gahee qabaachuu isaa hagam itti amantaa?

A) Sirriitti ittan amana B) Ittan amana C) itti hin amanu D) Sirriitti itti hin amanu

#### **Liqii waan biroof oolchuu**

54) Miseensi garee keessanii liqii liqeeffate waan liqeeffateef ala fayyadameeraa?

A) Eeyyee B) Lakki

55) Yoo deebiin kee gaaffii 54<sup>f</sup> eeyyee ta'e hojii keessan hammam miidhaa?

A) Garmalee B) homaa hin jedhu C) Baay'ee garmalee D) walumaa galattii homaayyuu

56) Yoo gaaffii 54<sup>ffaa</sup> eeyyee jettee deebiste eenyutu liqii sana kanfalaa?

A) Miseensichuma ofumsaa/shee B) Itti gaafatamaa garee C) Miseensa garee hunduma isaanii

57) Liqii keessan maaliif kaffaltuu?

A) Miseensa garee waliin haala gaariin turuu waan barbaadduuf

B) Dirqamakee bahuu waan barbaadduuf C) Liqii gara fulduraatiif iddoo guddaa waan keennituuf

D) Liqii irraa bilisa ta'uu waan barbaadduuf

### Hamma liqii

58) Dhaabbata kanarraa yeroo jalqabaaf qarshii meeqa liqeeffattanii?

qarshii \_\_\_\_\_.

59) Akkaa liqiin dabalaa adeemu gareen waliin turun isaan cimaa adeema.

A) Sirriitti ittan amana B) ittan amana C) Itti hin amanu D) Sirriitti itti hin amanu

60) Yoo deebiin kee gaaffii 59 sirriittii itti hin amanu kan jedhu ta'e sababiin isaa maal ta'aa?

---

### Firooma

61) Gareen keessan matii adda addaa irraa ijaaramee? A) Eeyyee B) Lakki C) Hin beeku

62) Gaaffii 61<sup>ffaa</sup> irraatti hundaa'uun fixa bahinsa garee tokkoof gareen sun akkamiin ijaaramuu qabaa? \_\_\_\_\_

### Leenjii

63) Yeroo liqii argachuuf garee ijaartan leenjii argattaniittuu?

A) Eeyyee B) Lakki C) Hin yaadadhu.

64) Based on your answer for question number 63 what is the reason? Please list it

---

65) Yoo deebiin gaaffii 63 eeyyee ta'e guyyaa meeqaaf liinjitanii? guyyaa \_\_\_\_\_ f.



66) Fageenyi miseensa garee keessan gidduu jiru hammam ta'aa?giddugaleessaan km \_\_\_\_\_ ta'a.

67) Fageenyi miscensa garee keessan gidduu garee keessan irratti dhiibbaa fideeraa?

A) Eeyyee B) Lakki

68) Yoo deebiin kee gaaffii 67<sup>ffaa</sup> eeyyee ta'e akkamittin garee keessan miidhuu danda'aa?

69) Baay'ina sangootaa miseensa gareen qabuu \_\_\_\_\_ Lakk.

70) Gaaffii 69 irratti hundaa'uun hammam garee keessan jijjiiruu danda'aa?

A) Garmalee jijjiira B) ni jijjiira C) hin jijjiiru D) garmalee hin jijjiiru.

71) Baay'ina matii miseensi garichaa qabu \_\_\_\_\_ Lakk.

72)Baay'inni miseensaa maatii garichaa dandeettii kaffaluu keessanii kan fixa ba'umsa garee keessanii agarsiisu irratti hammam dhiibbaa fidaa?

A) Garmalee dhiibbaa fida B) dhiibbaa fida C) dhiibbaa hin fidu D) garmalee dhiibbaa hin fidu

73) Erga garee kanatti dabalante bu'aa argatteetaa? A) Eeyyee B) Lakkii

74) Hamma walii galtee kee jijjiirama / bu'aa argame irratti qabdu tajaajiloota armaan gadii irratti mul'isii.

Jijjiirama	Sirriitti waliin galaa	Waliin gala	Walii hin galu	Sirriitti walii hin galu
Daa'imman gara mana barnootaatti erguun dabaleera				
Tajaajila fayyaa argachuuf mana yaalaa deemuun dabaleera				
Manajireenyaa mana citaa irraa gara				

qorqorroottii jijjiiranneerra				
Meeshaalee mana keessaa jijjiiranneerra.				

75) Haala bu'aa qabeessummaan gareen liqeffachuu itti fufuu fi fooya'uu danda'urratti yaada qabdan ibsaa

---

**Galatoomaa !**



### **Appendix 3**

#### **Interview for OCSSCO Woreda branch Managers**

**Jimma University**

**College Of Graduate Studies**

**School of Business and Economics**

**MSc Program in Accounting and Finance**

Introduction: Good morning/ afternoon. My name is Endalew Gutu: I am MSc Degree student in Accounting and finance at Jimma University. I am working this Thesis for the partial fulfillment of the requirements for the degree of masters in Accounting and finance. I am currently conducting studies on group lending area: a baseline study to assess the effectiveness of group lending and its impact on profitability in Jimma Zone. You have been selected to participate in this study because of your position in woreda OCSSCO Branch. The findings of this study will be for further research on this area in Oromia. All the information you give will be kept confidentially. First of all I want to thank you for your voluntary to make this interview.

Date: \_\_\_\_\_

Name of interviewee: \_\_\_\_\_

Position and name of the office: \_\_\_\_\_

The interview which is related to the assess of the effectiveness of group lending and its impact on profitability in Jimma Zone

1) Do you think that the group lending is effective and has impact in profitability efficiently?

How?

2) Do you believe that the group lending is important for change the leaving standard of the borrower ?In what manner?

3) Does the OCSSCO branch give training, for the group members to make them effective and have impacts on their profitability? For how longperiod of time?

4) Is the group that borrowed more bIRR is effective than those who borrowed less (few) bIRR?

How?

5) Does the loan period, have effect on group lending effectiveness and profitability?



**Appendix 4**  
**HOSMER AND LEMESHOW TEST**

Classification Table<sup>a,b,c</sup>

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

a. No terms in the model.

b. Initial Log-likelihood Function:  $-2 \text{ Log Likelihood} = 281.418$

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 <sup>a</sup>	.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<sup>a</sup>

Observed		Predicted		Percentage Correct
		know the credit default of the group	the group	
Step 1		Yes	No	
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 default of the group = yes		know the credit default of the group = no		Total
		Observed	Expected	Observed	Expected	
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
	10	4	2.381	19	20.619	23

Table 4.7 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 <sup>a</sup>	Ag	.342	.616	.307	1	.579	1.407	.511	3.878
	Educ	-.661	.387	2.915	1	.088***	.517	.273	.976
	Busty			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			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
	viscot(1)	40.944	2.502E4	.000	1	.999	6.048E17	.000	.
	Crovgr(1)	-8.165	4.707	3.008	1	.083***	.000	.000	.656
	efdis(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		
		Chi-Square = 175.838, P-Value = 0.000, degrees of freedom = 89 Nagelkerke R Square = 0 .774 Cox & Snell R Square = 0 .579 and -2 Log likelihood =104.155 <sup>a</sup>							
*, **, and ***, significant at significance level of 1%, 5% and 10% respectively.									

Correlation Test table

	Const.	ag	educ	Busty	Las	OTSC	Vfloat	numgroup	gen	sgmbtf	rulecond	viseot	crovgr	training	distance	Familysize
constant	1	.000	.000	.000	.000	.000	.000	.000	.000	.000	.00	.000	.000	-1.0	.000	.000
ag	.000	1	-.13	-.16	.021	.238	-.003	.113	-.03	-.15	-.01	-.07	-.05	.000	-.076	-.162
educ	.000	-.13	1	.185	-.01	.027	.015	-.113	.029	-.04	.006	-.04	.090	.000	.022	-.112
BUsty(1)	.000	-.16	.185	1	-.26	.037	-.085	-.035	-.02	.014	-.02	-.01	.060	.000	.101	.021
LaS	.000	.021	-.01	-.26	1	-.08	.064	-.044	.092	.025	.016	-.03	-.02	.000	-.026	.003
OTSC(1)	.000	.238	.027	.037	-.08	1	-.010	-.040	-.29	-.13	-.08	.001	-.09	.000	.090	.007
VFloat(1)	.000	-.00	.015	-.09	.064	-.01	1	.017	-.02	-.28	-.05	.079	-.23	.000	-.223	-.020
numgroup	.000	.113	-.11	-.04	.109	-.09	.017	1	.004	.084	.088	.163	-.01	.000	.019	-.035
gen(2)	.000	-.03	.029	-.02	.092	-.29	-.015	.004	1	.089	.243	.062	.177	.000	-.166	.054
sgmbtf(1)	.000	-.15	-.04	.014	.025	-.13	-.277	.084	.089	1	.100	-.01	-.01	.000	.445	-.063
rulecond(1)	.000	-.00	.006	-.02	.016	-.08	-.045	.088	.243	.100	1	.084	.067	.000	-.056	-.096
viseot(1)	.000	-.06	-.04	-.01	.105	-.03	.001	.035	.043	-.01	.084	1	.022	.000	-.140	.017
Crovgr(1)	.000	-.04	.090	.060	-.02	-.09	-.228	-.012	.177	-.01	.067	.022	1	.000	.029	-.071
training(1)	-1.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1	.000	.000
distance	.000	-.07	.022	.101	-.03	.090	-.223	.019	-.17	.445	-.06	-.14	.029	.000	1	-.020
Familysize	.000	-.16	-.11	.021	-.17	.003	.007	-.055	-.07	-.06	-.09	.017	-.07	.000	-.020	1





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