



ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF MANAGEMENT

**ASSESSMENT OF LOAN REPYMENT DETERMINANT FACTORS IN
MICROFINANCE INSTITUTIONS: THE CASES OF ADCSI, SFPI AND GASHA
MFIS**

By:- DEREJE SINISHAW TEREFE

**A THESIS SUBMITTED TO THE DEPARTMENT OF MANAGEMENT
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DECLARATION

First, I declare that this Thesis is my work and that all sources of materials used for this thesis have been fully acknowledged. This thesis has been submitted in partial fulfillment of the requirement for the Degree of Master of Art in Executive Masters of Business Administration (EMBA).

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EMBA Thesis Approval Sheet

The Thesis entitled, “ASSESSMENT OF LOAN REPAYMENT DETERMINANT FACTORS IN MICROFINANCE INSTITUTIONS: THE CASES OF ADCSI, SFPI AND GASHA MFIS” was conducted by Dereje Sinishaw under the supervision of Alem Hagos (PHD) and this title has been approved by the concerned bodies of Addis Ababa university for the partial fulfillment of the requirements for the degree of Masters of Art in Executive Masters of Business Administration (EMBA).

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Acronyms and Abbreviations

ADCSI=-	Addis saving and credit institution
AEMFI-	Association of Ethiopian Microfinance Institutions
AIM=	Amanah Ikhtiar Malaysia
AoBs’=	Age of Borrowers’
BEoBs’=	Business Experience of the borrowers’
BPR=	Bank Perkreditan Rakyat
BToBs’=	Business types of borrowers’
DAP=	Deficient analysis of project viability
ELoBs’=	Educational level of borrowers’
GBL=	Group based lending/solidarity group
ICS=	Inadequacy of collateral security
IRL =	Interest rate on the loan
LATC =	Lack of appropriate training to customers before and after the loan issued
LAS =	Lack of Appropriate client screening
LCI=	Lack of credit information linkage among MFIs
LDL =	Loan disbursement lag
LLR=	Loan loss rate
MENA=-	Middle East and North Africa
MFI=	Micro finance institution
MFW=	Microfund for Women

MSoBs’=	Marital status of borrowers’
NBE =	National Bank of Ethiopia
NGO=	Non-Governmental Organizations
OCSSCO=	Oromia Credit and Savings Share Company
OPPEXP=	Operating Expense
PAR =	Portfolio at risk
RCS=	Repayment culture of the society
ROA =	Return on Asset
SFPI =	Specialized Financial and Promotional Institution
SoBs’=	Sex of borrowers’
TSR =	Terms and schedule of repayment
WOMBOR=	Percentage of women borrowers
WOR=	Write-off Ratio
WS=	Weak supervisions before and after loan issued

Abstract

The study had looked at the potential of the country regarding loan repayment determinant factors by taking three MFIs as evidence. The study had used both primary and secondary data. The primary data is collected by a means of interview and questionnaire. The secondary data for the study were the empirical literatures of dependent and independent variables. The study had found variables that can affect the loan repayment activities of the three MFIs SFPI, ADCSI, and Gasha. One variable is used with the dependent variable that is the loan repayment of the MFIs. The data for this variable was collected from these three MFIs with questioners and interview. The correlation model is constructed for the dependent variable and the seventeen independent variables. Hypothesis testing is performed using spear man correlation coefficient method because of the independent variables are non-parametric variables. As a result of the hypothesis testing it was found that all the seventeen variables can affect loan repayment of the MFIs. All these variables had positive and significant effect on loan repayment performance. Finally the study had recommended what should be done to improve the loan repayment activities.

Key words: Micro Finance Institution, Loan, repayment

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Microfinance is the provision of a broad range of financial services such as deposits, loans, payments, money transfers and insurance to poor and low-income households and, their micro enterprises. Microfinance allows a sustainable form of financing for the most needed and it helps to reduce inequalities (Abebaw, 2014). Microfinance Institution may be defined as any financial institution which offers not only small loans to microenterprises, SMEs, groups and individuals but also provides other financial services like savings, insurance, and investment advice including even training programmes to its clients (Korankye, 2014).

The development of small and micro finance institution in Ethiopia is a recent phenomenon. The decision of the government of Ethiopia to restructure the financial sector in 1990s has had a significant impact on the growth and commercialization of both commercial banks and MFIs in Ethiopia. As the result currently, there are 32 microfinance institutions operating in Ethiopia including government owned, share companies as well as private MFIs, all are regulated by the National Bank of Ethiopia and all (MFIs) established under the Proclamation No. 40/96.

Similar to other countries, the objective of microfinance in Ethiopia is to provide financial services to low-income clients or solidarity lending groups including consumers and the self-employed, who traditionally lack access to banking and related services. Among the earliest microfinance institutions in the country are, Specialized Financial and Promotional Institution (SFPI), Addis saving and credit institution (ADCSI) and Gasha micro finance institution.

These three institutions are established to address the need for micro financing in the country. As that of institutions in the microfinance industry the primary asset of these micro finance institutions are their gross loan portfolio which means (total loan outstanding balance), which is highly dependent on loan repayment. Loan repayment is important to the financial success of any microfinance institutions. Drops in loan portfolio quality or loan repayment could cause decline in customer satisfaction, financial sustainability and loss of vision.

Thus, when loan portfolio quality suffers substantially, MFIs face far greater loan losses relative to the amounts outstanding than intermediaries that operate other types of portfolios secured with collateral (Sara, 2014). Loan repayment can be affected due to a number of reasons. Among the factors affecting the loan repayment are high interest rate, inadequate loan sizes, poor appraisal, lack of monitoring, and improper client selection (Korankye,2014).

For that reason, to remain in the industry and build up their competitive capability, micro finance institutions are expected to extensively work to identify factors which are affecting their loan repayment and take the proper action. Therefore, the trust or view of this research is to assess loan portfolio repayment determinant factors in the above mentioned three microfinance institutions from the national and international standard view of the industry and come with potential viable recommendations for advance.

1.2. Statement of the Problem

MFIs those established with an objective of providing sustainable credit and saving activities to promote micro and small businesses as a means of poverty and unemployment alleviation, and empower women. In short, micro finance institutions are expected to reduce poverty, which is considered as the most important development objective. Most MFIs do not require formal collateral, and instead the base loan decisions character, group solidarity, and past repayment history. Collateral, when pledged, may not be legally registered or may have little liquidation value. As the result, MFIs suffer with their loan repayment and face loan loss. If loans are not properly analyzed and approved to clients, there might be a significant adverse impact on the loan repayment (Crabb and Keller, 2004).

On the other hand, the quality of loan repayment is dependent on many factors. As per a study carried out by (Mosbah et. al, 2014), to assess the determinants of loan repayment quality in MENA region, main finding of their study showed that portfolio quality is determined positively by woman lagged PAR (PAR-1), gross loan portfolio, average loan per borrower.

The causes of loan default within micro finance institutions in Kenya studied on Causes of loan default within micro financing institutions in Kenya. The study found out that loan repayment default was as result of non supervision of borrowers by the MFIs (Okibo,2013).

As per the study by (Pasha, Tolosa,2014) to assess the performance of loan repayment determinants in Ethiopian micro finance, their result showed that age, educational level and loan repayment period are one of the major factors affecting loan repayment and loan portfolio quality. They found out that the percentages of defaulter respondents' decrease from youngsters group to elders group. Proportion of defaulting group was higher in respondents who were illiterate and obtained elementary school level, whereas, the percentages of non-defaulters increases as their level of education increases.

Factors that influence micro finance and loan repayment performance were studied with particular reference to the Oromia Credit and Savings Share Company (OCSSCO) in Kuyu, through the application of descriptive statistics and the probability model, shown that education, income, loan supervision, suitability of repayment period, and availability of other credit sources are important and significant factors that enhance the loan repayment performance (Abafita, 2003).

As it is evident in Abafita's and other similar studies, loan repayment performance is subject to various factors and identifying and clearly comprehending these factors play a vital role to ensure loan repayment of any micro finance institution. In fact, Identifying and analyzing such determining factors of loan repayment is vital in the achievement of profitability and sustainability of MFIs.

Generally, research under this article is rarely available. The managers of MFIs face a problem of identifying and managing the factors that determine the MFIs loan repayment and their effect on loan portfolio quality. Accordingly they face a problem of high loan pay back because of unknown factors. The MFIs are not successful in controlling and managing the loan default because they did not know about those factors that can affect the loan repayment. As the research conducted in this particular area is rarely available and academicians lack of the reference material of this area and they addressed only few factors. As the result, the researcher of this study is motivated to undertake a research in this particular area to fill these gaps.

This study conducted to determine the relationship between loan repayment and factors individual borrowers and institutional factors of SFPI, ADCSI, and Gasha MFIs. The study's findings can be used to better educate MFIs about the benefits of focusing and intensively working on factors that would have strong relationship with loan repayment.

Research Questions

- What are the major individual (borrower) specific factors that can affect loan repayment at SFPI, ADCSI and Gasha Micro Finance Institutions?
- What are the major institutional factors that can affect loan repayment at SFPI, ADCSI and Gasha Micro Finance Institutions?
- How can the MFIs identify and benefit by focusing and intensively working on the factors which have significant r/ship with loan repayment?

1.3. Objective of the study

1.3.1. General objectives

To identify, the factors those are affecting MFIs loan repayment and to determine the relation between the loan repayment and the identified factors, at the end to conclude and suggest in SFPI, ADCSI, and Gasha MFIs.

1.3.2. Specific objective of the study

- To identify the individual factors those are determining total loan repayment of MFIs at SFPI, ADCSI and Gasha MFIs.
- To identify the institutional factors those are determining total loan repayment of MFIs at SFPI, ADCSI and Gasha MFIs.
- To determine how the MFIs can benefit by focusing and intensively working on the major factors which have significant r/ship to enhance loan repayment?

1.4. Hypotheses of the study

The following hypotheses were developed based on both theoretical framework and extensive literature review on factors affecting loan repayment of Micro-finance institutions.

- H1- There is significant correlation between gender of borrowers' and loan repayment in Micro Finance Institutions.
- H2- There is significant correlation between age of borrowers' and loan repayment in Micro Finance Institutions.

- H3- There is significant correlation between marital status of borrowers and loan repayment in Micro Finance Institutions.
- H4- There is significant correlation between educational level of borrowers and loan repayment in Micro Finance Institutions.
- H5- There is significant correlation between business types of borrowers and loan repayment in Micro Finance Institutions.
- H6- There is significant correlation between business Experience of the borrowers and loan repayment in Micro Finance Institutions.
- H7- There is significant correlation between repayment culture of the society and loan repayment in Micro Finance Institutions.
- H8- There is significant correlations between loan disbursements lag and loan repayment in Micro Finance Institutions.
- H9- There is significant correlation between terms and schedule of repayment and loan repayment in Micro Finance Institutions.
- H10- There is significant correlation between groups based lending/solidarity group and loan repayment in Micro Finance Institutions.
- H11- There is significant correlation between Weak supervisions before and after loan issued and loan repayment in Micro Finance Institutions.
- H12- There is significant correlation between deficient analysis of project viability and loan repayment in Micro Finance Institutions.
- H13- There is significant correlation between inadequacy of collateral security and loan repayment in Micro Finance Institutions.
- H14- There is significant correlation between interest rate on the loan and loan repayment in Micro Finance Institutions.
- H15- There is significant correlation between lack of credit information linkage among MFIs and loan repayment in Micro Finance Institutions.
- H16- There is significant correlation between lacks of appropriate client screening and loan repayment in Micro Finance Institutions.
- H17- There is significant correlation between lack of appropriate training to customers before and after the loan issued and loan repayment in Micro Finance Institutions.

1.5. Significance of the Study

The study conducted on title of assessment of loan repayment determinant factors in SFPI, ADCSI and Gash. Then, it will provide valuable information and better approach in maintaining a good performance of the institutions under study. From this research paper the following parties can be benefited.

- It will help for top and medium level management of SFPI, ADCSI and Gasha MFIs to recognize the major determinant factors affecting the repayment or quality of their loan portfolio.
- For similar Microfinance institution to take a possible solution to there institution by looking the trend of these MFIs and to be sustainable financially.
- For Concerned government body to know these factors affecting micro finance institutions repayment and design mechanisms to support them.
- The finding of the study will help as initial insight for the policy maker, researcher, who is interested for further investigation.

1.6. Scope of the study

The study focused only on determining a correlation between loan repayment and factors like sex of borrowers', age of borrowers', business type of borrowers' etc in SFPI, ADCSI, and Gasha MFIs.

1.7. Limitations of the Study

Most financial institutions and the supervisory body were not willing to disclose information to the researcher due to fear of break of Promise of Privacy (Duty of confidentiality). This constraint was dealt with by relying on the published reports and responses of the participants' of the study. A due attention was given to assuring the respondents on matters of confidentiality. Though the intention of the researcher was to employ regression analysis model by using the panel data from the National Bank of Ethiopia, the researcher was not able to obtain these data from the institutions because of unjustifiable reason of confidentiality given to him by the National Bank of Ethiopia. Therefore, the researcher was forced to focus and carried out the study based on the responses obtained through questionnaire and interview.

The other limitation, the researcher encountered was the hesitation of loan officers and the branch managers to fill the questionnaire and participate on the interview sessions. This was overcome by continues contacts and power of persuasion.

1.8. Organization of the study

The final paper for the study is organized in three parts, the preliminary page, the main page and the end page. The preliminary page deals with the title, acknowledgment, list of abbreviations, list of tables and figures, table of content, and the main pages contains five chapters in general. Chapter one includes the introduction part of the study, chapter two deals the review of related literature, chapter three deals the methodology of the study, chapter four deals data analysis, chapter five focuses on findings, conclusions and recommendations, finally the end pages contains references and appendices.

CHAPTER TWO

LITERATURE REVIEW

2.1. Theoretical Overview of Microfinance

2.1.1. Definition of micro finance

Different authors and organizations have defined Microfinance institutions in different ways. However the concept or the meaning of the definitions is usually the same in which microfinance refers to the provision of financial services; primarily savings and credit to the poor and low income households that don't have access to commercial banks service.

Microfinance is the provision of a broad range of financial services such as deposits, loans, payments, services, money transfers and insurance to poor and low- income households and, their micro enterprises. Micro finance organizations are provided by three types of providers.

- Formal institutions, such as rural banks and cooperatives;
- Semiformal institutions, such as non- government organizations; and
- Informal sources, such as money lenders and shopkeepers

Institutional microfinance is defined to include microfinance services provided by both formal and semi-formal institutions. Microfinance institutions are defined as institutions whose major business is the provision of microfinance services.

Micro credit: - is the extension of small loans to micro-entrepreneurs who lack collateral and do not qualify traditional bank loans. In developing countries especially, micro credit enables very poor people to engage in self- employment projects that generate income. Micro credit is crucial to the micro finance field by providing access to financial capital. (Murdick 1990)

Ethiopian Proclamation No. 626/2009 defines micro financing business as “the provision of financial services like accepting savings extending credit, drawing and accepting drafts payable, providing money transfer services and others specified in the Article 3(2) of the proclamation.

2.1.2. The Development of Micro Finance

The history of microfinance is often associated with the rise of nongovernmental organizations (NGOs) providing microcredit services to the poor and the development of a

handful of microfinance banks. In the early 1990s, standards began to emerge calling for stronger financial management of microcredit providers, particularly in their delinquency management and reporting. At the same time, credit unions and banks involved in micro lending developed stronger monitoring techniques for their microcredit portfolios (Barres et. al, 2005).

According to records formal credit and saving institutions for the poor have been around for decades; providing customers were traditionally neglected by commercial banks a way obtain financial services through cooperatives and development finance institutions. One of the earlier and longer-lived micro credit organizations providing small loans to rural poor with no collateral was the Irish Loan Fund System, initiated in the early 1700s by the author and nationalist Jonathan Swift. Swift's idea began slowly but by the 1840s had become a widespread institution of about 300 funds all over Ireland. Their principal purpose was making small loans with interest for short periods. At their peak they were making loan to 20% of all Irish households annually.

In the 1800s various types of larger and more formal savings and credit institutions began to emerge in Europe, organized primarily among the rural and urban poor. These institutions were known as people's banks, credit unions, and saving and credit co-operatives

The concept of the credit union was developed by Friedrich Wilhelm Raiffeisen and his supporters. Their humane action was motivated by concern to assist the rural population to break out of their dependence on money lenders and to improve their welfare. From 1870, the unions expanded rapidly over a large sector of the Rhine Province and other regions of the German states. The cooperative movement in developed countries and donors, also to developing countries expand. In Indonesia, the Indonesian people's credit banks (BPR) or The Bank Perkreditan Rakyat opened in 1895. The BPR became the largest micro finance system in Indonesia with close to 9000 units.

As per different records, in the early 1900s, various adaptations of these models began to appear in parts of rural Latin America. While goal of such rural finance interventions was usually defined in terms of modernizing the agricultural sector, they usually had two specific objectives: increased commercialization of rural sector, by mobilizing "idle" savings and increasing investment through credit, and reducing oppressive feudal relations that were enforced through indebtedness. In most cases, these new banks for the poor were not owned

by the poor themselves, as they have been in Europe, but by government agencies or private banks. Over the years, these institutions became inefficient and at times, abusive.

The global micro finance movement emerged in the mid-1970s with a series of lending experiments in poor village throughout Asia and Latin America. Perhaps, the most celebrated millstone in the development of microfinance was the introduction of the Grameen Bank in Bangladesh.

In 1976, economics professor Muhammad Yunus began experimenting with the concept of micro credit by making small loans to poor households in rural Bangladesh village. He found that loans not only enabled borrowers to run and grow simple business like bamboo- weaving and rice-husking but the borrowers also repaid their loans reliably despite the fact that they possessed no collateral to guarantee their loans. This discovery resists conventional banking wisdom of the time, in which the poor were viewed as ‘un-bankable’ due to their lack of collateral and non- existent credit histories. Because they were viewed as high risk to lenders, poor populations worldwide were systematically excluded from their countries’ formal financial systems. Their only banking options were to borrow from local money lenders who charged annual interest rate as high as 100 percent, or to borrow from family members.

The success of Yunus’ lending experiments leads to establishment of Grameen Bank in 1983. As of march 2006, the Grameen Bank has 1952 branches across India and Bangladesh, worked in 63,712 villages, and employed 17,686 staffs. The bank serves approximately 5.98 million borrowers, 96% of whom are women, and reports a repayment rate of 98 percent. In 2006, Muhammad Yunus was awarded the Nobel peace prize for his contributions to the global microfinance movement.

In the early 1990s the term “microcredit” was replaced by “microfinance” which included not only credits but also other financial services for poor people (Elia, M. 2006). Microfinance has become a diverse and growing industry. Thousands of microfinance institutions (MFIs) exist, ranging from grass roots self-help groups to commercial banks that provide financial services to millions of microenterprises and low-income households (Barres et. al, 2005).

2.1.3. The Ethiopian Scenario

The development of microfinance industry in Ethiopia can be traced bank to the early 1970s, when NGO’s in Ethiopia were delivering relief and development services such as emergency food, education, water and medicine to the underprivileged. NGO’s were directly funding micro credit services as part and bundle of their relief programs.

Currently, the number of MFI's registered by NBE as per the requirement of proclamation No.40/96 has reached 32. The micro finance industry focuses on delivery financial services that met the needs of poor and help them in their struggle to alleviate their poverty, as well as strengthen the food security program. The financial services provided by the industry include short to medium- term loans and saving products, as well as transfer of fund for a variety of government organizations like payment of pension funds.

According to the latest Ethiopian Microfinance Institutions Performance Analysis report produced by the Association of Ethiopian Microfinance Institutions (AEMFI) in 2014, there are currently 32 registered MFIs that operate in Ethiopia. They together serve 2.9 million borrowers with a portfolio of Birr 664.8million (USD). Total savings or deposits in the sector amounted to 485.4Million (USD). The average loan size is 229.24MILLION (USD) and 57% of the borrowers are women. On average the ROA of the MFIs is 2% and ROE is 8%. OSS is 113% on average and FSS is 74%.(wolday Amaha 2014)

2.1.4. Characteristics of Micro Finance Institutions

As per the performance indicator guideline of MFIs (2004), the major characteristics of Microfinance lending, which makes the MFIs portfolio risk different from that Conventional Financial Institutions are given hereunder, the auditors while planning a review of MFIs credit portfolio and designing test procedures should take in to consideration these characteristics.

- MFIs grant a large number of small loans, and so receive an even larger number of small repayments. Further the Microfinance operations are often dispersed over a wide geographic area and to be efficient MFIs need streamlined and decentralized operation structures. These issues make it harder to maintain effective portfolio information and management system.
- Decentralization implies that relatively few members are involved in increase the opportunity for deviation from approved policies and for fraud. Decentralization can also increase the risk of error or manipulation in transferring information from branches to headquarters.

- To handle small transaction efficiently, MFIs face great pressure to cut costs sometimes at the expense of adequate portfolio controls and information, as well as sufficient supervision of clients and loan officers.
- Many microfinance portfolios grow rapidly, which puts pressure on systems and can camouflage repayment problems. A rapidly growing portfolio has a higher percentage of loans that are in the early stages of repayment, the delinquency problems are likely to appear at later stage.
- MFIs generally feel, not always correctly, that writing off loans from their books would send wrong signals both to the borrowers and credit officers that the MFIs do not pay taxes and such provisioning and write off doesn't produce and tax savings for them.

2.1.5. Loan Portfolio Quality

Business Dictionary (2014) defines a Loan portfolio as the total of all loans held by a bank or finance company on any given day. Therefore, individual loans form a loan portfolio in a bank or any other MFI. Moreover, the size of loan portfolio depends on the size the individual loan which is also influenced by the economic status of the borrowers in a particular location (Magali, 2014).

A microfinance institution's largest asset is its loan portfolio. Therefore, the loan portfolio is also its largest source of risk. For MFIs whose loans are typically not backed by collateral, the quality of the portfolio is absolutely crucial. However, the quality of that asset, and conversely the risk, can be quite difficult to measure.

Fortunately, many MFIs are well experienced in maintaining loan portfolios of very high quality. In fact, leading microfinance institutions typically outperform their commercial bank peers in many countries. The most widely used measure of portfolio quality in the microfinance industry is Portfolio at Risk (PAR), which measures the portion of the loan portfolio affected by delinquency as a percentage of the total portfolio.

Although various other measures are regularly used, PAR has emerged as the leading indicator because it is easily understandable, does not understate risk, and is comparable across institutions. A microenterprise loan is typically considered to be at risk if a payment on the loan is more than 30 days late.

As per the technical guide on performance and social indicators for MFIS, this rule is much stricter than what is practiced among commercial banks, but it is justified given the lack of bankable collateral and the short-term tenure of most loans. In addition to the Portfolio at Risk indicator, three other indicators related to portfolio quality are frequently used to compliment PAR and give a better picture of overall portfolio quality. These include the write-off ratio, Provision Expense Ratio and Risk Coverage Ratio. The four portfolio quality indicators, when viewed in conjunction with one another, provide a robust view of an MFI's portfolio quality and related risks.

Derrick et al (1998) argued that loan portfolio is the lifeblood of each lending institution, since the success of the MFI depends on how well it manages its portfolio. They recommended the agricultural lenders to consider the needs of different groups of their clients in order to remain competitive in the agricultural lending market. They further argued that reducing operating expenses, paper work and provision of the faster loans will strengthen the competitive advantage of MFIs which issue loans to farmers in USA. Moreover, they stressed that effective loan portfolio management identify and control lending risks ((Magali, 2014).

2.1.6. Determinant factors of Loan Portfolio Quality

As different literatures and studies stated, the loan portfolio quality of the MFIs can be affected internally by the MFIs and different external factors. Some of the most important one stated as follow: Researchers have developed numerous theories and empirical framework that seeks to explain the repayment rates, frequently associated with credit to poor and low income people in developing countries.

Studies that attempted to explain the repayment performance by Individuals Factors related to the borrower characteristics, where as some others explain the payment by the institutional determinants: factors related to institutional characteristics of MFI. Other categories of factors can explain PAR such as nature of contract, nature of activity, social ties between group members and cultural factors.

I. Individual Factors

Gender of borrowers' is one of the determinant factors in the loan repayment at Micro-finance institutions. Discussing the issue, Kibrom said it is argued that lending to women can lead to their economic empowerment and inculcate them a culture of hard work and financial discipline, which can lead to high loan repayment rates, thus women borrowers may have

high loan repayment performance. (Kibrom, 2010). Another study with the same stand is a study conducted by Mokhtar and his colleagues' on "Determinants of microcredit loans repayment problem among microfinance borrowers in Malaysia'. One of their finding is the existence of significant positive sign on the gender variable indicating the probability of a loan repayment problem was higher for males than for females. (Mokhtar et.al, 2012).

As per (Fielden et al., 2003) cited in Tundui, C and Tundui, 2013), gender differences also make male and female business owners behave differently with respect to responses to recognition and exploitation of entrepreneurial opportunities (Fielden et al., 2003), consequently, affecting their businesses performance and loan payment in different magnitudes.(Tundui, C and Tundui, 2013).

The quality of loan portfolio is dependent on many factors. As per a study carried out by (Mosbah et. al, 2014), to assess the determinants of portfolio quality in MENA region, main finding of their study showed that portfolio quality is determined positively by woman lagged PAR (PAR-1), gross loan portfolio, average loan per borrower, etc.

Age of borrowers' is another factor influencing loan repayment. As per Kibrom, the younger the age the higher may be his/her productivity, knowledge and the higher or the older the age the lower may be his/her productivity and this leads to successful loan repayment and default respectively. On the other way round, the older person may have a lot of experience on business, which may lead to successful loan repayment, and the younger one may have limited experience attributed to his age and this may lead to unsuccessful loan repayment. Hence, age contribution to successful loan repayment performance of the private borrowers cannot be predetermined. (Kibrom,2010). On the other hand, as of the study by Mokhtar and his colleagues', borrowers in the 46 to 55 age group had a higher probability of having repayment problems. The say this finding contradicted the hypothesis that older borrowers were more responsible in repaying their loans than younger borrowers (Mokhtar et.al, 2012).

In general terms it is believed that the tendency of loan default decreases as ones educational level increases. This is what Angaine & Waari's study on factors influencing loan repayment in Micro-finance institutions in Kenya revealed. The result of their study shown that in relation to loan repayment default, 9.76% of those with primary level education defaulted, 62.93% of those with secondary level of education defaulted, 47.71% of those with college level education defaulted and 0.0% of those with university level education defaulted. This

demonstrate that loan repayment default cases were low among people with post secondary education as compared to those who had up to secondary level of education.

They say these finding were similar to those obtained in a study to examine the socio-economic factors influencing loan repayment among small scale farmers in Ogbomoso agricultural zone of Oyo State of Nigeria. The results of the multiple regression analysis showed that amount of loan obtained by farmers; years of farming experience with credit use and level of education were the major factors that positively and significantly influenced loan repayment.(Angaine and Waari,2014).

Business type of borrowers' has been found to be among the factors affecting loan repayment. In their study titled: "Determinants of microcredit loans repayment problem among microfinance borrowers in Malaysia, Mokhtar & his colleagues able to identify the existence of positive and significant relationship between business type and loan repayment at 5% significance level. They explained that the findings of their study implied that borrowers involved in agriculture, such as farming, animal husbandry and fisheries, were more likely to have a problem repaying the microcredit loan than borrowers involved in a small business activity. The finding supports the hypothesis that the lower revenue cycle in agricultural businesses creates repayment problems for borrowers. The reliance of agriculture on the weather caused fluctuations in production that were beyond the control of the farmers.(Mokhtar et.al, 2012).

On the other hand Angaine and Waari's study on factors influencing loan repayment in Micro-finance institutions in Kenya found out that borrowers□ involved in non-production oriented business activities such as services or the support sectors who had training in their particular business and who borrowed higher loans had lower probabilities of defaulting. (Angaine and Waari, 2014).

It is a matter of fact that experience plays a major role in any life endeavour either the endeavour is economic oriented or not. Kibrom says borrowers who have been in business longer are expected to be more successful with their enterprise. They have more stable sales and cash flows than those who have just started. Thus, those who are more experienced will have high repayment rates. Hence, it is expected that experience will have a positive impact on successful loan repayment performance of private borrowers. (Kibrom, 2010).

II. Institutional Factors

Time and schedule of repayment contributes its own share in the speedy or slow repayment of loans. Short repayment period might cause the borrower not to have enough revenue to make loan repayments. On the other hand, long repayment period are detrimental to borrowers if they cannot access future loans until the existing loans is paid back. Hence both short and long term repayment period can have negative effect on successful loan repayment, however if the repayment period is medium it is expected that the borrower will have an opportunity to repay his/her loan successfully (Kibrom,2010).

On the other hand Mokhtar & his colleagues found that a weekly loan repayment schedule (short) posing problems for borrowers who generated a lower revenue cycle. Therefore, they advise MFIs to consider lowering the weekly repayment amount and a longer duration of payments in response to borrowers who generate lower revenue having a problem meeting their weekly repayment (Mokhtar et.al, 2012).

Repayments are made by installments. Hence a delayed installment is said to be delinquent and a repayment that has not been made is said to be in default. If one group member defaults, the other group members make up for the re-payment amount. This delay may affect the portfolio quality of MFIs. By definition, a borrower is “good” if he reimburses regularly loans in the conditions of the contract and does never had a late payment. If knew, refereed to Trabelsi and Chichti (2011) at least once, a delay in the repayment of his loan, it will be considered as “bad” borrower.

Study by Zeller (1998) focused 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 cohesive groups pool risks by diversifying the members’ asset portfolio so that their repayment performance is improved even in communities with high-risk exposure. Most of the time group members become careless to pay loan on the assumption that other borrowers will pay for them. Group lending liability is also more costly for clients that are good credit risks particularly when they are forced to repay the loans of the defaulting members or when clients with smaller loans become reluctant to guarantee borrowers with larger loans.

Onyeagocha, et.al (2012) have analyzed the loan repayment performance, institutional factors, and factors affecting repayment rate of microfinance institutions (MFIs) in the South-

east states of Nigeria for total of 36 MFIs. Results from the study, affirmed that the formal segment was more organized, better equipped with higher quality and well motivated staff than the semi-formal and informal segments. The informal sector presented the best repayment picture of the three segments, followed by the semi- formal institutions.

Other institutional determinants of loan repayment of microfinance institutions were outreach, shocks, training duration, loan size and credit officer's experience. Chowdhury, et.al (2012) Bangladesh Krishi2 bank: the survey data were collected from 90 leaders of the bank which was entrusted with the task of disbursement and repayment of loan. Causes of default are mainly inadequate income, crop failure, high installment of repayment, lack of understanding of terms, liquidity problem, excessive debt taking, Ineffective storage/marketing, improper selection of borrowers, political pressure and interference, lack of co-operation from the government, lack of proper Supervision.

According to Al Azzam & Mimouni (2012) Jordan: 160 borrowing groups from the Microfund for Women (MFW) survey suggested that social ties that are founded on friendship, neighborhood, and on good communication seem to lower the number of days of late repayment. Therefore, social ties between group members improve group repayment performance.

Generally, as per the above and many more studies emphasize, loan portfolio quality is subject to various individual and institutional characteristics and the ability of the Micro Finance Institution to identify and work on each and every determinant factor plays a major role in ensuring the sustainability of the institutions.

2.2. Review of Empirical Studies

This section reviewed the related empirical evidence on the factors affecting MFIs repayment and identified the research gap that the current study is intended to fill out partially.

According to a study conducted by Mosbah, et.al (2014) to explain repayment or default phenomenon at MENA region, the study has done an empirical work on 30 MFIs from MENA region over the period 2000-2013 and the main finding showed that portfolio quality at the region is determined positively by woman lagged PAR (PAR-1), gross loan portfolio, average loan per borrower.

Korankye (2014) has undertaken a study to identify Causes and Control of Loan Default/Delinquency in Microfinance Institutions in Ghana. To this end, the researcher has randomly selected twenty-five microfinance institutions and two hundred and fifty clients for the study. The study found that the major causes of loan default include; high interest rate, inadequate loan sizes, poor appraisal, lack of monitoring, and improper client selection.

In his effort to assess the effectiveness of loan Portfolio Management in Rural Tanzania Magali (2014) has collected and analyzed a total of 496 loan records and the result of the study has revealed that the doubtful and bad loans were 51 and 31 million Tanzanian Shilling which was more than 10% of the loan portfolio. In addition, the regression analysis revealed that the quality of loan portfolio was positively influenced by the loan size and fluctuation of the price of agricultural products.

In another study carried out by Kofi (2012) to determine the causes and impact of nonperforming loans on the operations of microfinance institutions in Ghana, the study found out that business failure, lack of monitoring of loans and inadequate marketing avenues were identified as the principal causes of the non performing loans in the organization.

In the case of Ethiopia, A study has been carried out by Pasha and Negese (2014) to study major socio- economic factors and loan related factors that determine loan repayment performance of borrowers in Sidama Micro Finance Institution. To this end, the researchers' collected data from primary and secondary resources and analyzed by using Binary logistic model is used. Through the study 14 determinants' are selected for evaluation, out of which 9 variables (Age, Education level, Time laps between loan application and disbursement, Loan size, Loan diversion, Repayment period, Number of dependants within and out household, Training, and Supervision and advisory visits are found significant in determining loan repayment performance

2.2.1. Identification of Knowledge Gap

Identifying and analyzing factors determining the loan repayment of micro finance institutions is vital in the achievement of profitability and sustainability of the institutions. Though the area is the one requiring a due attention and extensive research, only few researches have been done so far giving the needed attention to actual factors affecting loan

portfolio quality of MFIs in Ethiopia. In this regard, the researcher had come up with two potential papers conducted in the area.

The first one was by Pasha and Negese (2014) of the study of Performance of Loan Repayment Determinants in Ethiopian Micro Finance, only focusing on a single micro finance institution namely, Sidama Micro Finance Institution. The research has attempted to infer the finding of the study to other micro finance institutions in Ethiopia in nutshell. The potential weakness of the study is its mere focus on a single institution and study area. The researcher believes this is more of a case study and may limit the applicability of the findings to other micro finance institutions in the country.

The second study the researcher encountered was by Sara (2014). The objective of the study was to assess the Determinants of microfinance institutions loan repayment in Ethiopia. The study has just used panel data of fourteen (14) MFIs from the period 2003- 2012. Besides its mere focus on records, the study has ignored the individual specific factors affecting loan portfolio quality such as sex of borrowers, their age, Their Educational level and the type of business they are engaged in etc.

The researcher believes the exclusion of the individual factors might limit the potential of the study to come up with the holistic picture of the problem and the findings might concentrate on one side of the problem.

An attempted to fill these gaps, this study has examined the factors affecting the loan repayment of more than one institution (They are 3 in number) and attempted to determine there is a correlation between loan repayment and factors like sex of borrowers', age of borrowers', business type of borrowers' etc in SFPI, ADCSI, and Gasha MFIs. In addition, the study can be used as a starting point for any interested party in the area.

2.3. Conceptual Framework of the Study

Different empirical evidences suggested that loan repayment or financial performance of financial institutions specifically MFIs is affected by internal and external factors. This study used both internal and external determinants of MFIs loan repayment factors. The study was identifying how these variables are determined the loan repayment performance of MFIs in Ethiopia.

INDEPENDENT VARIABLES

Borrower Specific Factors

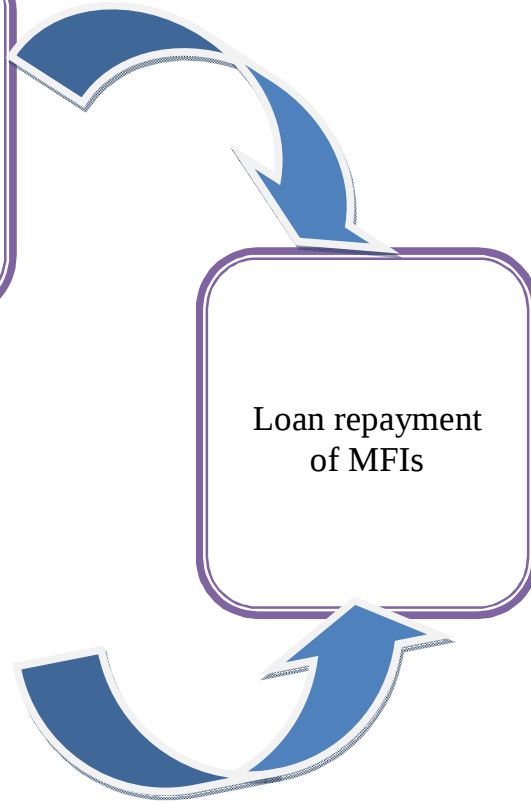
- Sex
- Age
- Marital status
- Educational level
- Business types
- Businesses skills
- Experience of the Borrower
- Repayment culture of society

Institution Specific Factors

- Loan disbursement lag
- Terms and schedule of repayment
- Group lending/solidarity group
- Supervisions before and after loan issued
- Deficient analysis of project viability
- Lack of appropriate training to customers before and after the loan issued
- Poor client screening out
- Inadequacy of collateral security
- Interest rate on the loan
- Lack of credit information among MFIs

DEPENDENT VARIABLE

Loan repayment
of MFIs



Source:-Compiled by the researcher

CHAPTER THREE

3. RESEARCH METHODOLOGY

This chapter describes in detail, how the study has been carried out, what activities to be done, research design, Subjects or data sources, sample size, sample method, the instruments for data collection, and the reason for choosing particular procedures.

3.1. Research Design

A Correlational design was used to collect and analyse data because the independent variables are non-parametric variables. The researcher believed this would have a power to individually investigate and study the strength of relationship each independent variable has with the dependent variable.

3.2. Data Source and Type

Generally, the study has used two major sources of data, primary and secondary data sources. The primary data has been gathered from Branch managers, and loan officers through questionnaire and interview. And secondary data has been gathered from organization reports and other related publications, and websites. The study has attempted to collect relevant and reliable data from these sources and used it as an input in an appropriate and professional manner.

3.3. Target Population

The target populations of this study were three micro finance institutions in the country namely, Addis saving and credit institution, Specialized Financial and Promotional Institution and Gasha Micro Finance Institution. The main reason for chosen these three MFIs because of ADCSI is one of the main governmental MFI and SFPI and Gash MFIs are the leading Share Companies and the earliest MFIs in the country as well.

3.4. The Sampling Technique, Sample size and Procedure

The main focus of the study was to assess the loan repayment and its determinant factors at Specialized Financial and Promotional Institution, Addis saving and credit institution and Gasha Micro-finance institution. The main reason for chosen these three MFIs because of ADCSI is one of the main governmental MFI and SFPI and Gash MFIs are the leading Share Companies and the earliest MFIs in the country as well. Hence, the researcher assumed that

these MFIs have the potential and tangible historical background to represent other both governmental and Share companies operating in micro-finance business in the country.

Therefore, the research has used purposive sampling technique and approach all branch managers and loan officers working in these three Institutions. The reason behind the selection of these two categories is that because they are working at front line and have good knowledge and experience in the area more than other staffs.

Currently, Specialized Financial and Promotional Institution, Addis saving and credit institution and Gasha Micro-finance institutions have 16, 10 and 6 branches, respectively. In addition, there are a total of 58 loan officers working in the three MFIs. Therefore, the participants of the study were 32 Branch Managers and 58 Loan Officers. Therefore, the total numbers of participants of the study were 90 in number.

3.5. Data Collection Instruments

Questionnaire and interview questions have been used as data collection instrument.

3.5.1. Questionnaire

Well organized and structured questionnaire has been used to collect the data from branch managers, and loan officers of ADCSI, SFPI and Gasha MFIs. The use of questionnaire is chosen because it gives the researcher the power to reach a number of respondents within a limited period of time and it is convenient ensure the privacy of respondents.

The design of the questionnaire has considered the need for both open and close-ended questions. Open-ended questions have been used in order to provide the respondents with an opportunity to explain their views freely. The closed-ended questions have been also necessary to cover more ground within a limited timeframe, particularly for those respondents who would have severe time constraints.

It is to be noted that, although the questionnaire used in this study is expected to be self-administered, there was frequent interaction to ensure control over the way in which the questionnaire is going to be answered and to avoid ambiguity.

3.5.2. Interview

Interview schedule has been held based on the pre defined schedule. Before proceeding to any interview session, interviewees have been made to get clarification on the purpose of the session as well as confidentiality matters. The interviews have been conducted in Amharic

language and the recorded data has been categorized based on similarities of responses and then transcribed in to English language. Interview schedules made to be semi-structured to allow participants to share, highlight and explain their viewpoints, while allowing the researcher to seek clarifications from the participants as the same time.

The interview sessions were held with 3 branch managers of ADCSI, SFPI and Gasha MFIs and the analysis of the interview was made based on the information obtained from these branch managers.

3.6. Method of Data Analysis

Following the data collection stage the researcher had summarize the data gained through questionnaires from branch managers and loan officers of Specialized Financial and Promotional Institution, Addis saving and credit institution and Gasha Micro-finance in a manner that it gives reliable information. The questionnaires are analyzed using descriptive analysis techniques. The researcher had used SPSS version 16 software to analyze the questionnaires and describe the result. Accordingly 90 questionnaires are analyzed and interpreted using the statistical results of SPSS.

Accordingly, the descriptive statistics for the dependent variable Loan repayment and the independent variables(Sex of borrowers' , Age of borrowers , Marital status of borrowers , Educational level of borrowers, Business types of borrowers ---) is displayed using SPSS and the results are interpreted quantitatively as well as qualitatively. Descriptive statistics including standard deviation, mean, minimum, maximum and variance were used to analyze the collected data. To conduct this, the researcher has used SPSS version 16. This software was selected following its ability to help researchers to analyze research easily and efficiently.

Furthermore, test of Correlations test was conducted to test each and every hypothesis listed out in chapter one of this document. The main test used in this regard is *Spearman rho* as the data obtained has ordinal value rather than having a precise numerical value (continuous data).

3.7. Variable Definition

3.7.1. Dependent variable

The dependent variable of this study is loan repayment (Loan portfolio quality).

3.7.2. Independent Variables

The independent variables of this study are (Sex of borrowers(SoBs'), Age of borrowers'(AoBs'), Marital status of borrowers(MSoBs'), Educational level of borrowers'(ELoBs'), Business types of borrowers'(BToBs'), Business Experience of the borrowers'(BEoBs'), Repayment culture of the society(RCS), Loan disbursement lag(LDL), Terms and schedule of repayment(TSR), Group based lending/solidarity group(GBL), Weak supervisions before and after loan issued(WS), Deficient analysis of project viability(DAP), Inadequacy of collateral security(ICS), Interest rate on the loan(IRL), Lack of credit information linkage among MFIs(LCI), Lack of Appropriate client screening(LAS) and Lack of appropriate training to customers before and after the loan issued(LATC)).

3.8. Ethical Considerations

Letter of support was obtained from Addis Ababa University Department of Management. At the time of data collection, the purpose of the study has been clarified to respondents in detail. In addition, verbal consent was obtained from the participants of the study. Furthermore, privacy and confidentiality of the respondents was maintained appropriately.

CHAPTER FOUR

Presentation, Analysis and Interpretation of Data

Introduction

In this chapter the data collected through questionnaire and interview is presented, analyzed, and interpreted using different techniques. In this chapter a detailed description of the analysis and interpretation of data is outlined. All statistics were calculated using the Statistical Package for Social Sciences (SPSS). Furthermore, SPSS is used to study the frequency and the relationship among different variables which include descriptive statistics of variables and correlation results for dependent and independent variables.

Response Rate

A total of 90 questionnaires were distributed for Branch managers and loan officers of Specialized Financial and Promotional Institution, Addis credit and saving institution and Gasha Micro-finance institution. And the researcher had collected back all the 90 questionnaires. Therefore, the analysis and interpretation to follow is made based on these questionnaires.

4.1. Analysis of Questionnaire

The responses to the questionnaire are quantified and presented in number and percentage forms. In addition, graphs and tables are used for presentation followed by narrative to interpret & elaborate figures and relationships.

4.1.1. Current Position of Respondents'

Table 1:- The frequency distribution of respondents' by Current Position

Current position of participants'					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Branch Manager	32	36.7	36.7	36.7
	Loan Officer	58	63.3	63.3	100.0
	Total	90	100.0	100.0	

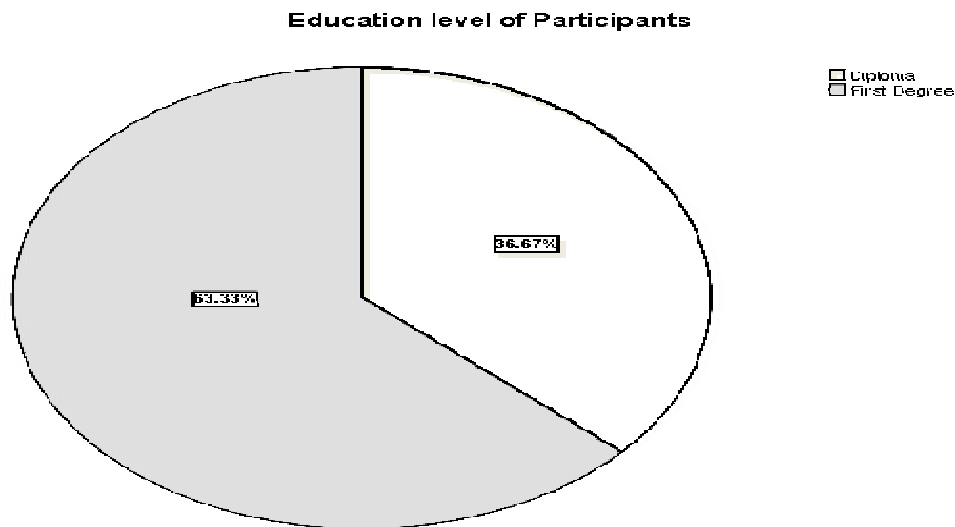
Source: - Spss output

Table 1 presents the frequency distribution of respondents. Out of the total number of respondents, 33(36.7%) are currently holding the position of branch manager, while the remaining 57(63.3%) are loan officers.

4.1.2. Educational Level of Respondents'

Concerning the question of educational level, respondents were provided with options to choose from. The option provided to them include Diploma, First Degree, Second Degree and above Second Degree. The responses of the respondents' is summarized and presented in the following figure.

Figure 1:- Education Level of Respondents



Source: - SPSS output

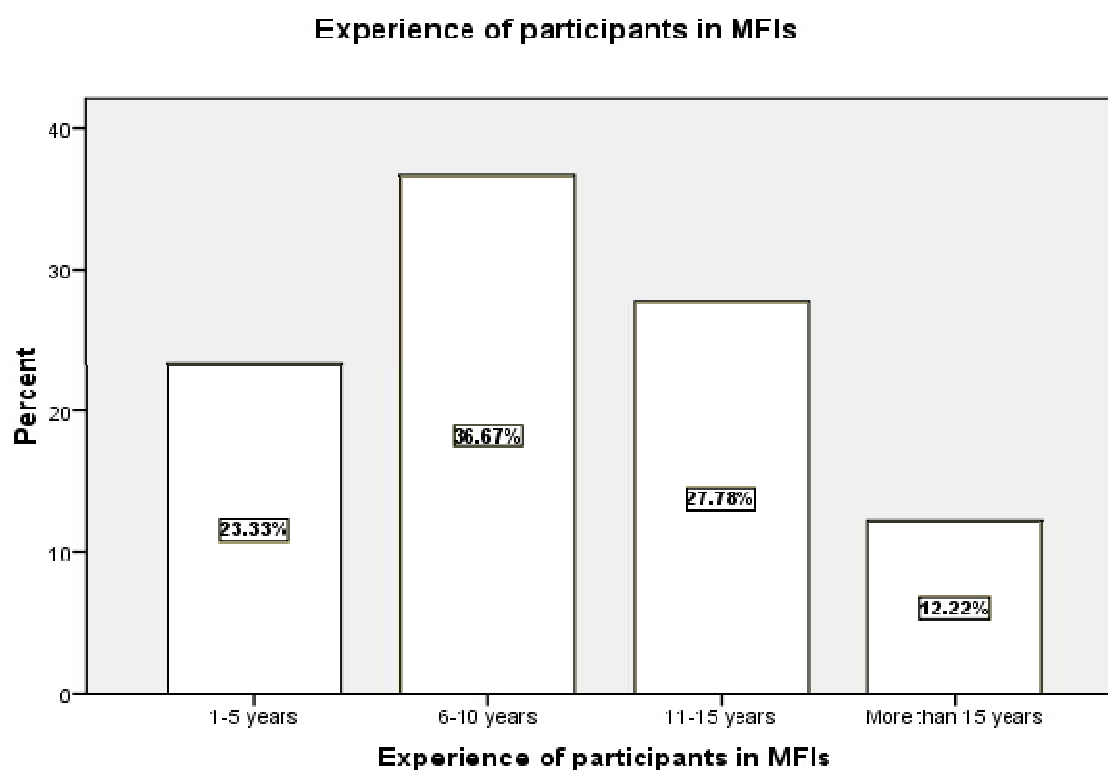
As presented in the figure above, all of the respondents are found having diploma or first degree. However, the first degree holders take the lion share compared to the diploma holders. Accordingly, 63% of the respondents have first degree, while the remaining 37% are diploma holders. This may grant the attainment of logical data from the respondents’.

4.1.3. Work experience in the MFIs

It is believed that a good experience in a certain area enables a person to have a well developed knowledge about that particular field more than those having low exposure and familiarity.

Thus, it is having this fact in mind that the following question is forwarded to the respondents. Accordingly, the work experience composition of the respondents in Micro- finance institutions is summarized as follows;

Figure 2:- Respondents’ work experience in MFIs



Source: - SPSS output

Figure 2 presents the number of years respondents' have been working in micro-finance institutions. Based on the data indicated above, out of the total of 90 respondents, 21(23.3%) have been working in the micro finance industry 1-5 years, while 33(36.7%), 25(27.8%), and 11 (12.2%) have a work experience of 6-10, 11-15 and above 15 years, respectively.

This shows that almost 76.7% of the respondents have a work experience of more than five years in the micro finance industry. This indicates that the majorities of the respondents have relevant exposure related to the issues in the field of micro finance and are in a good position to provide reliable data which in turn would have paramount value to the research quality.

4.2. Descriptive Statistics of Variables

A descriptive statistics has been conducted for the dependent variable (loan repayment) and independent variables (Sex of borrowers(SoBs'), Age of borrowers'(AoBs'), Marital status of borrowers(MSoBs'), Educational level of borrowers'(ELoBs'), Business types of borrowers'(BToBs'), Business Experience of the borrowers'(BEoBs'), Repayment culture of the society(RCS), Loan disbursement lag(DDL), Terms and schedule of repayment(TSR), Group based lending/solidarity group(GBL), Weak supervisions before and after loan issued(WS), Deficient analysis of project viability(DAP), Inadequacy of collateral security(ICS), Interest rate on the loan(IRR), Lack of credit information linkage among MFIs(LCI), Lack of Appropriate client screening(LAS) and Lack of appropriate training to customers before and after the loan issued(LATC)) It includes mean, median, maximum, minimum, standard deviation and Others statistics value. The result of the descriptive statistics and its interpretations are presented as follows.

Table 2:- Descriptive statistics value of SoBs', AoBs', MSoBs' and ELoBs'

		Statistics			
		Sex of borrowers'	Age of borrowers'	Marital status of borrowers'	Educational level of borrowers'
N	Valid	90	90	90	90
	Missing	0	0	0	0
Mean		3.8778	4.1000	3.8222	3.3333
Median		4.0000	4.0000	4.0000	4.0000
Std. Deviation		1.17872	1.07107	1.06610	1.15145
Variance		1.389	1.147	1.137	1.326
Minimum		1.00	1.00	1.00	1.00
Maximum		5.00	5.00	5.00	5.00

Source: - SPSS output

The mean of one of the independent variable, sex of borrowers' is 3.9 and the median 4.0 which are closer to the maximum 5.0. This shows that average of the data of SoBs' is closer to its maximum value. The minimum value and the maximum value are 1.0 and 5.0, respectively. And its Standard deviation is 1.2, while the variance being 1.4. The other independent variable is AoBs', with the mean of 4 and median of 4.0 which is closer to the maximum 5. This indicates that the average of the data of AoBs' is closer to the maximum value. The minimum value and the maximum value are 1 and 5, respectively. And its Standard deviation is 1.1, while the variance being 1.2.

The other independent variable is MSoBs' with the mean result 3.8 and median of 4.0 which is still closer to the maximum 5.0. This indicates that the average of the data of MSoBs' is closer to the maximum value. The minimum value and the maximum value are 1.0 and 5.0, respectively. And its Standard deviation is 1.1, while the variance being 1.14. Still the other independent variable indicated in the above table is ELoBs'. This variable has the mean 3.3 and median of 4.0 which is still closer to the maximum 5.0. This figure gives a green light to consider that the average of the data of ELoBs' is again closer to the maximum value. The minimum value and the maximum value for this variable are 1.0 and 5.0, respectively, having the Standard deviation is 1.2, while the variance being 1.3.

Table 3:- Descriptive statistics value of BToBs', BEOBs' RCS and LDL

Continued....

Statistics					
		Business types of borrowers'	Business Experience of borrowers'	Repayment culture of the society	Loan disbursement lag
N	Valid	90	90	90	90
	Missing	0	0	0	0
Mean		4.0000	4.1444	4.3667	4.0556
Median		4.0000	4.0000	5.0000	4.5000
Std. Deviation		1.09133	.96641	1.01062	1.24847
Variance		1.191	.934	1.021	1.559
Minimum		1.00	1.00	1.00	1.00
Maximum		5.00	5.00	5.00	5.00

Source: - SPSS output

Table 3 presents the descriptive statistics of four independent variables, namely Business types of borrowers', Business experience of borrowers', Repayment culture of the society and Loan disbursement lag. The out of the four, BToBs' is with the lowest mean (4.0) and median of 4.0 which is still close to the maximum value of 5.0. This shows that the average of the data of BToBs' is closer to the maximum value. The minimum value and the maximum value of this variable are found to be 1.0 and 5.0, respectively. And its Standard deviation is 1.1, while the variance being 1.2. The other variable indicated above is BEOBs'. The variable has a mean of 4.1 and median of 4.0 which is still close to the maximum value of 5.0. This shows that the average of the data of BEOBs' is closer to the maximum value. The minimum value and the maximum value of this variable are found to be 1.0 and 5.0, respectively. And its Standard deviation is 0.97, while the variance being 0.93.

Still the other independent variable presented in the table is RCS. As shown above this variable has the highest mean (4.4) among the variables in this category and its median is found to be 5.0 which is almost equals to the maximum value of 5.0. This shows that the average of the data of RCS very much closer to the maximum value. The minimum value and the maximum value of this variable are found to be 1.0 and 5.0, respectively. And its Standard deviation is 1.0, while the variance is 1.0. The last independent variable presented in

the above table is LDL, with the mean of 4.1 and median of 4.5 which is closer to the maximum value of 5.0. This could be evidence for the LDL much closer to the maximum value. The minimum value and the maximum value of this variable are still the same as the others 1.0 and 5.0, respectively. And its Standard deviation is 1.3, while the variance is 1.6.

Table 4:- Descriptive statistics value of TSR, GBL, WS and DAPV

Continued....

Statistics					
		Terms and Schedule of Repayment	Group based Lending/solidarit y group	Weak supervisions before and after loan issued	Deficient analysis of project viability
N	Valid	90	90	90	90
	Missing	0	0	0	0
Mean		4.4667	4.1778	4.1556	3.9667
Median		5.0000	4.0000	5.0000	4.0000
Std. Deviation		.88939	1.02308	1.22622	1.22199
Variance		.791	1.047	1.504	1.493
Minimum		1.00	1.00	1.00	1.00
Maximum		5.00	5.00	5.00	5.00

Source: - SPSS output

Table 4 presents descriptive statistics value of another four independent variables Terms and schedule of repayment, Group based lending/solidarity group, weak supervisions before and after loan issued and Deficiency analysis of project viability. The mean of TSR is 4.5 and its median is found to be 5.0 which is almost equal to the maximum value of 5.0. This shows that the average of the data of TSR very much closer to the maximum value. The minimum value and the maximum value of this variable are found to be 1.0 and 5.0, respectively. And its Standard deviation is 0.89, while the variance being 0.8. The other independent variable is GBL, with the mean of 4.2 and median of 4.0 which is closer to the maximum 5. This indicates that the average of the data of GBL is closer to the maximum value. The minimum value and the maximum value are 1 and 5, respectively. And its Standard deviation is 1.0, while the variance being 1.0.

Still the other variable presented in the table is WS with the mean result 4.2 and median of 5.0 which is almost equal to the maximum 5.0. This indicates that the average of the data of

WS is very closer to the maximum value. The minimum value and the maximum value are 1.0 and 5.0, respectively. And its Standard deviation is 1.2, while the variance being 1.5. The last variable in the table is DAPV. This variable has a mean of 3.9 and median of 4.0 which is still closer to the maximum 5.0. This figure gives a green light to consider that the average of the data of DAPV is again closer to the maximum value. The minimum value and the maximum value for this variable are 1.0 and 5.0, respectively, having the Standard deviation is 1.2, while the variance being 1.5.

Table 5:- Descriptive statistics value of ICS, IRoL, LCIL, LACS and LAT

The final table containing the results of descriptive statistics values has incorporated the last five independent variables identified in this study. The summary of the descriptive statistics values is presented as in the following table.

Continued....

		Statistics				
		Inadequacy of collateral security	Interest rate on the loan	Lack of credit information linkage among MFIs	Lack of Appropriate client screening	Lack of appropriate training to customers before and after the loan issued
N	Valid	90	90	90	90	90
	Missing	0	0	0	0	0
Mean		3.8778	3.2889	4.1111	4.1111	4.1222
Median		4.0000	4.0000	5.0000	5.0000	5.0000
Std. Deviation		1.12007	1.38405	1.24019	1.32770	1.27048
Variance		1.255	1.916	1.538	1.763	1.614
Minimum		1.00	1.00	1.00	1.00	1.00
Maximum		5.00	5.00	5.00	5.00	5.00

Source: - SPSS output

Table 3 presents the descriptive statistics of five independent variables, namely “Inadequacy of collateral security”, “Interest rate on the loan”, “Lack of credit information linkage among MFIs”, “Lack of Appropriate client screening”, and “Lack of appropriate training to customers before and after the loan issued”. ICS has mean 3.9 and median of 4.0 which is still close to the maximum value of 5.0. This shows that the average of the data of ICS is

closer to the maximum value. The minimum value and the maximum value of this variable are found to be 1.0 and 5.0, respectively. And its Standard deviation is 1.1, while the variance being 1.3. The other variable indicated above is “IRoL”. The variable has a mean of 3.3 and median of 4.0 which is still close to the maximum value of 5.0. This shows that the average of the data of IRoL is closer to the maximum value. The minimum value and the maximum value of this variable are found to be 1.0 and 5.0, respectively. And its Standard deviation is 1.4, while the variance being 1.9.

Still the other independent variable presented in the table is LCIL. As shown above this variable have a mean 4.1 and a median of 4.0 which is closer the maximum value of 5.0. This shows that the average of the data of LCIL is very much closer to the maximum value. The minimum value and the maximum value of this variable are found to be 1.0 and 5.0, respectively. And its Standard deviation is 1.3, while the variance is 1.8. LACS is another variable in the table. It has a mean of 4.1 and median of 5.0 which is almost equal to the maximum value of 5.0. This could be evidence for the average of the data for LACS to be very much closer to the maximum value. The minimum value and the maximum value of this variable are still the same as the others 1.0 and 5.0, respectively. And its Standard deviation is 1.3, while the variance is 1.6.

And finally, the last variable among the independent variables is LAT with a mean 4.1 and median of 5.0 which is almost equal to the maximum value of 5.0. This could be evidence for the average of the data for LAT to be very much closer to the maximum value. The minimum value and the maximum value of this variable are still the same as the others 1.0 and 5.0, respectively. And its Standard deviation is 1.2, while the variance is 1.6.

4.3. Correlation Analysis

Correlation is a measure of the degree of association between variables. The main attempt of the correlation analysis is to test the existence of significant relationship between variables under study or not.

In the pages to follow the correlation level of the different independent variables is presented against the dependent variable (Loan repayment).

Table 7:- Correlation between Loan repayment and (SoBs', AoBs', MSoBs, and ELoBs')

Correlations

			Sex of borrowers	Age of borrowers	Marital status of borrowers	Education al level of borrowers	Rate of loan repayment
Spearman's rho	Sex of borrowers	Correlation Coefficient	1.000	.882**	.923**	.823**	.950**
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	90	90	90	90	90
	Age of borrowers	Correlation Coefficient	.882**	1.000	.850**	.832**	.876**
		Sig. (2-tailed)	.000	.	.000	.000	.000
		N	90	90	90	90	90
	Marital status of borrowers	Correlation Coefficient	.923**	.850**	1.000	.870**	.946**
		Sig. (2-tailed)	.000	.000	.	.000	.000
		N	90	90	90	90	90
	Educational level of borrowers	Correlation Coefficient	.823**	.832**	.870**	1.000	.885**
		Sig. (2-tailed)	.000	.000	.000	.	.000
		N	90	90	90	90	90
	Rate of loan repayment	Correlation Coefficient	.950**	.876**	.946**	.885**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	90	90	90	90	90

** . Correlation is significant at the 0.01 level (2-tailed).

Table 7 presents the correlation between the dependent variable (Loan repayment) and other four independent variables. As it is shown in the above table, four of the independent variables have significant positive correlation with the dependent variable at a confidence level of 0.01. The highest correlation loan repayment has is with SoBs' which has a correlation coefficient of 0.95, the second highest correlation is with MSoBs' which has a correlation coefficient of 0.946. The third highest correlation is with that of ELoBs' which has a correlation coefficient of 0.885. And the last one is the correlation with AoB's which has a correlation coefficient of 0.876.

From this we can understand that loan repayment is subject to positive change with every increase and decrease in the four variables. In another words, loan repayment follows the directional change in SoBs', AoBs', MSoBs, and ELoBs'. Therefore, the variables indicated in the above table have significant correlation with loan repayment.

Table 8:- Correlation between Loan repayment and (BToBs', BEOBs' RCS and LDL)
Continued....

Correlations			Rate of loan repayment	Business types of borrowers	Business Experience of the borrowers	Repayme nt culture of the society	Loan disbursem ent lag
Spearman's rho	Rate of loan repayment	Correlation Coefficient	1.000	.904**	.878**	.826**	.857**
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	90	90	90	90	90
	Business types of borrowers	Correlation Coefficient	.904**	1.000	.960**	.807**	.904**
		Sig. (2-tailed)	.000	.	.000	.000	.000
		N	90	90	90	90	90
	Business Experience of the borrowers	Correlation Coefficient	.878**	.960**	1.000	.802**	.905**
		Sig. (2-tailed)	.000	.000	.	.000	.000
		N	90	90	90	90	90
	Repayment culture of the society	Correlation Coefficient	.826**	.807**	.802**	1.000	.875**
		Sig. (2-tailed)	.000	.000	.000	.	.000
		N	90	90	90	90	90
	Loan disbursement lag	Correlation Coefficient	.857**	.904**	.905**	.875**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	90	90	90	90	90

** . Correlation is significant at the 0.01 level (2-tailed).

The above table shows the relationship between Loan repayment and other four independent variables. As it is presented in the above table, four of the independent variables have significant positive correlation with the dependent variable at a confidence level of 0.01. The highest correlation loan repayment has is with BToBs' which has a correlation coefficient of 0.904, the second highest correlation is with BEOBs' which has a correlation coefficient of 0.878. The third highest correlation is with that of LDL which has a correlation coefficient of 0.857. And the last one is the correlation with RCS which has a correlation coefficient of 0.826.

From this data we can be aware of that the positive significant relationship between loan repayment and the other four variables. In another words, loan repayment follows the directional change in BToBs', BEOBs' RCS and LDL. Therefore, the variables indicated in the above table have significant correlation with loan repayment.

Table 9: Correlation between Loan repayment, TSR, GBL, WS and DAPV

Continued....

			Correlations				
			Deficient Analysis of project viability	Terms and schedule of repayment	Group based lending/solidarity group	Weak supervisions before and after loan issued	Rate of loan repayment
Spearman's rho	Deficient Analysis of project viability	Correlation Coefficient	1.000	.855**	.967**	.938**	.857**
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	90	90	90	90	90
	Terms and schedule of repayment	Correlation Coefficient	.855**	1.000	.825**	.904**	.818**
		Sig. (2-tailed)	.000	.	.000	.000	.000
		N	90	90	90	90	90
	Group based lending/solidarity group	Correlation Coefficient	.967**	.825**	1.000	.911**	.858**
		Sig. (2-tailed)	.000	.000	.	.000	.000
		N	90	90	90	90	90
	Weak supervisions before and after loan issued	Correlation Coefficient	.938**	.904**	.911**	1.000	.837**
		Sig. (2-tailed)	.000	.000	.000	.	.000
		N	90	90	90	90	90
	Rate of loan repayment	Correlation Coefficient	.857**	.818**	.858**	.837**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	90	90	90	90	90

** . Correlation is significant at the 0.01 level (2-tailed).

Table 9 presents the relationship between Loan repayment and other four independent variables. As it is shown above, four of the independent variables have significant positive correlation with the dependent variable at a confidence level of 0.01. The highest correlation loan repayment has is with GBL which has a correlation coefficient of 0.858, the second highest correlation is with DAPV which has a correlation coefficient of 0.857. The third highest correlation is with that of WS which has a correlation coefficient of 0.837. And the last one is the correlation with TSR which has a correlation coefficient of 0.818.

From this data we can appreciate the existence of positive significant relationship between loan repayment and the other four variables. In another words, loan repayment follows the directional change in TSR, GBL, WS and DAPV. Therefore, the variables indicated in the above table have significant correlation with loan repayment.

Table 10:- Correlation between Loan repayment and ICS, IRoL, LCIL, LACS and LAT
Continued....

Correlations

			Inadequacy of collateral security	Interest rate on the loan	Lack of credit information linkage among MFIs	Lack of appropriate client screening	Lack of appropriate training to customers before and after the loan issued	Rate of loan repayment
Spearman's rho	Inadequacy of collateral security	Correlation Coefficient	1.000	.899**	.836**	.816**	.824**	.968**
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000
		N	90	90	90	90	90	90
	Interest rate on the loan	Correlation Coefficient	.899**	1.000	.910**	.893**	.897**	.924**
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000
		N	90	90	90	90	90	90
	Lack of credit information linkage among MFIs	Correlation Coefficient	.836**	.910**	1.000	.959**	.973**	.848**
		Sig. (2-tailed)	.000	.000	.	.000	.000	.000
		N	90	90	90	90	90	90
	Lack of Appropriate client screening	Correlation Coefficient	.816**	.893**	.959**	1.000	.984**	.837**
		Sig. (2-tailed)	.000	.000	.000	.	.000	.000
		N	90	90	90	90	90	90
	Lack of appropriate training to customers before and after the loan issued	Correlation Coefficient	.824**	.897**	.973**	.984**	1.000	.840**
		Sig. (2-tailed)	.000	.000	.000	.000	.	.000
		N	90	90	90	90	90	90
	Rate of loan repayment	Correlation Coefficient	.968**	.924**	.848**	.837**	.840**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.
		N	90	90	90	90	90	90

** . Correlation is significant at the 0.01 level (2-tailed).

The above table shows the relationship between Loan repayment and other five independent variables. As it is presented in the above table, five of the independent variables have significant positive correlation with the dependent variable at a confidence level of 0.01. The highest correlation loan repayment has is with ICS which has a correlation coefficient of 0.968, the second highest correlation is with IRoL which has a correlation coefficient of

0.924. The third highest correlation is with that of LCIL which has a correlation coefficient of 0.848. And the fourth highest correlation the dependent variable has is with LAT which has a correlation coefficient of 0.840. And the last highest correlation coefficient in the group is the correlation with LACS which has a correlation coefficient of 0.837.

From this data we can be aware of that the positive significant relationship between loan repayment and the other five variables. In another words, loan repayment follows the directional change in ICS, IRoL, LCIL, LACS and LAT. Therefore, the variables indicated in the above table have significant correlation with loan repayment.

4.4. Analysis of Interview Questions

The following section summarized and presented the result of interview sessions with 3 branch managers of ADCSI, SFPI and Gasha MFIs. Since the responses of the participants of the interview session was more or less alike, the researcher has preferred to summarize and present the result of the session in one set.

a. In your opinion and industry experience, what are the major factors affecting loan portfolio quality of MFIs?

Responding to this question the interviewees have come up with various factors that affect loan repayment. Among the factors raised are; project/business type of clients, the country's economic condition, the industry in which the clients took loan, business experience of clients, supervision, age of clients, marital status of clients, loan disbursement lag, ..etc.

b. Do you really believe gender of borrowers' has a relationship with loan repayment? If yes, how?

When answered, this question the respondents' said yes, and stated their reason as female clients have better performance in loan repayment than the male borrowers, because women have many responsibilities and they are wise to save money. Furthermore, one the MFIs objective is empowering women as the result they got trainings from different stake holders and by the MFIs for financial management as compere to men.

c. Do you really think age of borrowers' has a relationship with loan repayment? If yes, how?

Responding to this question the respondents said yes and when explaining they said the elders are more sensitive to their names, respecting in the society and the norms and culture of the society rather than the younger people. As the result, they have better loan repayment performance as compared to the young borrowers in the MFIs.

d. Do you really think educational level of borrowers' has a relationship with loan repayment? If yes, how?

When answering to this question, the respondents said they do believe educational level of borrowers have relationship with loan repayment. When explaining they said the educated borrowers have better performance than the uneducated one because they know very well the consequence of loan unpaid according to the terms and the agreement entered. However, the uneducated people or borrowers they have no know how what will be the effect not paid the loan as per the agreement. Specially the rural people, they believe with information that got from one of the borrowers. For example, one of the borrowers informed the others that the loan will not paid and it is cancelled by MFIs they accept him or her without any evidence.

e. Do you really think marital status of borrowers' has a relationship with loan repayment? If yes, how?

Responding to this question the respondents said yes and when explaining they said it is obvious that the couple borrowers are more responsible to their family rather than the single one because these married borrowers do not want to expose their family for different factors due to this loan and they cannot shift or move from their residential area but the single ones they can do that if they are not interested to pay their loan.

f. Do you really think business type of borrowers' has a relationship with loan repayment? If yes, how?

When answering to this question, the respondents said they do believe business type of borrowers have relationship with loan repayment. When explaining they said the business type of the borrowers affect the repayment of the loan repayment. For instance, the agriculture loan is very sensitive and it is a risk type of business as compared to other type of

businesses which run by the borrowers because the agriculture activities are exposed to different factors which lead loan not paid on time as per schedule like drought, product price fluctuation, over rain fall and so on.

g. Do you really think business experience of borrowers' has a relationship with loan repayment? If yes, how?

Answering to this they said business experience is one of the factors which contribute the loan of the MFIs not paid as per the agreement interred during the loan issued. Because the borrowers who have not enough work experience to the business failed their business and not paid their loan as per the greed. Most of the time, the non-business experienced borrowers planned to run their business by borrowing from microfinance institution and they took a loan but due to lack of business experience how to manage their business they failed the business and the loan payment.

h. Do you really think repayment culture of the society has a relationship with loan repayment? If yes, how?

When answering to this question, the respondents said they do believe repayment culture of the society do have relationship with loan repayment. When explaining they said the loan repayment history and culture of the society can affect the loan repayment activity of the microfinance institutions. Due to our poverty and low economic growth, many non-governmental organizations are giving support in the form of aid in many part of our country. This activity in many area and society made influence for the activities of microfinance institutions loan repayment because the society culture had developed get aid or charity but not repaid.

i. Do you really think loan disbursement lag has a relationship with loan repayment? If yes, how?

Answering to this the respondents said; it is understandable that the loan disbursement lag affects the loan repayment activities of the MFIs because the borrowers applied for the loan to perform some business on specific time so that if the loan is not provided or disbursed as needed the borrower may not use it for the intended purpose and finally it affects the loan repayment. For instance, the famers may need a loan for agricultural and the merchants to use the loan for holiday or other occasional time activity so that if they were not get the loan on

time they will not use this money for the intended purpose rather than shift it for consummation or other purpose and finally will fail to pay.

j. Do you really think terms and the schedule time of the loan repayment has a relationship with loan repayment? If yes, how?

Responding to this question, the respondents said; it is also clear that the loan terms and the schedule time of the loan repayment is affected the loan repayment. The loan repayment schedule and terms must be fixed based on the cash flow of the borrowers. Otherwise it is seriously difficult for both the MFIs and the borrowers to be effective as per the schedule and terms. For instance, if one MFI fix the agriculture loan repayment period or term and the repayment schedule from June to December end it is difficult for borrowers to be effective as per their agreement.

k. Do you really think group lending system has a relationship with loan repayment? If yes, how?

Answering to this question the respondents' said; in the group lending system the group members jointly and severally guaranteed for MFIs loans that are channelled through group. Compulsory savings of individual group members will also be used as additional security for the loan. Because of this, if the group member one or two of them become unable to pay their loan due to different reasons the remaining members will paid their loan up to their compulsory saving balance and they stopped paid the loan and became defaulters. So it has its significant contribution for loan unpaid as per the schedule.

l. Do you really think supervision has a relationship with loan repayment? If yes, how?

Regarding to this question the respondents said, unless the MFIs supervise the borrowers activity before the loan and after the loan issued, it is difficult to collect the repayment. So before the loan issued it is mandatory to visit and supervise the borrowers business viability and after the loan issued will be regularly followed up to ascertain its proper utilization for the intended purpose.

m. Do you really think poor analysis of the borrowers' project feasibility has a relationship with loan repayment? If yes, how?

Responding to this question the respondents said it has not a doubt that poor analysis of the borrowers' project feasibility contributes its effect to the loan repayment. Because the

borrowers invested the loan on this project, so that if this project is not profitable the borrowers will fail his business and the loan repayment of the MFIs.

n. Do you really think inadequacy of the loan collateral has a relationship with loan repayment? If yes, how?

Answering to this the respondents said the main objective of the MFIs is poverty reduction so that provide the financial service or loan for low income people who lacks to get access loan from commercial banks due to collateral issue and small loan size. As the result, the MFIs render this service by using group collaterals without any fiscal guarantee which is highly expose for loan unpaid.

o. Do you really think loan interest rate has a relationship with loan repayment? If yes, how?

Regarding this question the respondents stated their opinion as most of the time the loan interest rate is not the issue of the loan repayment and unpaid because many customers can paid the loan properly on time with high interest rate if other conditions smoothly run and their business is profitable or viable. But some MFIs provide the loan with flat interest rate which means the interest is calculated all times with initial loan balance but not the reaming balance left in the hands of the borrowers. This issue is invited the borrowers for loan unpaid as per the agreement made.

p. Do you really think lack of credit information linkage among MFIs has a relationship with loan repayment? If yes, how?

Responding to this question the respondents said that the case of the Ethiopian MFIs have credit information centre to exchange the list of their borrowers just like for any commercial banks practiced. Because of this the loan clients can take loan for many different MFIs even with different branches in the same microfinance institution which leads the borrower over indebtedness and failed to pay the loan. Moreover, due to the absence of this information one family member also take loan from different MFIs or with one MFI and fail to pay the loan because the source of the income is one.

4.5. Hypothesis Testing

Since the Data is ordinal in nature, so in order to find out the significance between loan repayment and the other independent variables, , the Hypothesis formulated were tested using the non parametric test i.e. Spearman's rho Test. The findings of the test are as given below.

Table 11: Interpretation of Test of Hypothesis

	Hypothesis	Test	Correlation Coefficient	Result
1	H0:- There is no significant correlation between gender of borrowers' and loan repayment in Micro Finance Institutions H1:- There is significant correlation between gender of borrowers' and loan repayment in Micro Finance Institutions.	Spearman's rho	.950	Sig.
2	H0:- There is no significant correlation between age of borrowers' and loan repayment in Micro Finance Institutions. H1:- There is significant correlation between age of borrowers' and loan repayment in Micro Finance Institutions.	Spearman's rho	.876**	Sig.
3	H0:- There is no significant correlation between marital status of borrowers and loan repayment in Micro Finance Institutions H1:- There is significant correlation between marital status of borrowers and loan repayment in Micro Finance Institutions	Spearman's rho	.946**	Sig.
4	H0:- There is no significant correlation between Educational level of borrowers and loan repayment in Micro Finance Institutions H1:- There is significant correlation between Educational level of borrowers and loan repayment in Micro Finance Institutions	Spearman's rho	.885**	Sig.
5	H0:- There is no significant correlation between Business types of borrowers and loan repayment in Micro Finance Institutions H1:- There is significant correlation between Business types of borrowers and loan repayment in Micro Finance Institutions	Spearman's rho	.904**	Sig.
6	H0:- There is no significant correlation between Business Experience of the borrowers and loan repayment in Micro Finance Institutions H1:- There is significant correlation between Business Experience of the borrowers and loan repayment in Micro Finance Institutions	Spearman's rho	.905**	Sig.
7	H0:- There is no significant correlation between Repayment culture of the society and loan repayment in Micro Finance Institutions	Spearman's rho	.875**	Sig.

	H1:- There is significant correlation between Repayment culture of the society and loan repayment in Micro Finance Institutions			
8	H0:- There is no significant correlation between Loan disbursement lag and loan repayment in Micro Finance Institutions H1:- There is significant correlation between Loan disbursement lag and loan repayment in Micro Finance Institutions	Spearman's rho	.857**	Sig.
9	H0:- There is no significant correlation between Terms and schedule of repayment and loan repayment in Micro Finance Institutions. H1:- There is significant correlation between Terms and schedule of repayment and loan repayment in Micro Finance Institutions.	Spearman's rho	.818**	Sig.
10	H0:- There is no significant correlation between group based lending/solidarity group and loan repayment in Micro Finance Institutions H1:- There is significant correlation between group based lending/solidarity group and loan repayment in Micro Finance Institutions.	Spearman's rho	.858**	Sig.
11	H0:- There is no significant correlation between Weak supervisions before and after loan issued and loan repayment in Micro Finance Institutions. H1:- There is significant correlation between Weak supervisions before and after loan issued and loan repayment in Micro Finance Institutions.	Spearman's rho	.837**	Sig.
12	H0:- There is significant correlation between Deficient analysis of project viability and loan repayment in Micro Finance Institutions H1:- There is significant correlation between Deficient analysis of project viability and loan repayment in Micro Finance Institutions.	Spearman's rho	.857**	Sig.
13	H0:- There is no significant correlation between Inadequacy of collateral security and loan repayment in Micro Finance Institutions H1:- There is significant correlation between Inadequacy of collateral security and loan repayment in Micro Finance Institutions	Spearman's rho	.968**	Sig.
14	H0:- There is no significant correlation between Interest rate on the loan and loan repayment in Micro Finance Institutions. H1:- There is significant correlation between Interest rate on the loan and loan repayment in Micro Finance Institutions.	Spearman's rho	.924**	Sig.
15	H0:- There is no significant correlation between Lack of credit information linkage among MFIs	Spearman's rho	.848**	Sig.

	<i>and loan repayment in Micro Finance Institutions</i> H1:- <i>There is significant correlation between Lack of credit information linkage among MFIs and loan repayment in Micro Finance Institutions.</i>			
16	H0:- <i>There is no significant correlation between Lack of Appropriate client screening and loan repayment in Micro Finance Institutions</i> H1:- <i>There is significant correlation between Lack of Appropriate client screening and loan repayment in Micro Finance Institutions.</i>	Spearman's rho	.837**	Sig.
17	H0:- <i>There is no significant correlation between Lack of appropriate training to customers before and after the loan issued and loan repayment in Micro Finance Institutions</i> H1:- <i>There is significant correlation between Lack of appropriate training to customers before and after the loan issued and loan repayment in Micro Finance Institutions.</i>	Spearman's rho	.840**	Sig.

**Asymptotic significance is displayed. The significance level is .001

4.6. Summary

The development of small and micro finance institution in Ethiopia is a recent phenomenon. The decision of the government of Ethiopia to restructure the financial sector in 1990s has had a significant impact on the growth and commercialization of both commercial banks and MFIs in Ethiopia. As the result currently, there are 32 microfinance institutions operating in Ethiopia including government own, share companies as well as private MFIs, all are regulated by the National Bank of Ethiopia and all (MFIs) established under the Proclamation No. 40/96.

Similar to other countries, the objective of microfinance in Ethiopia is to provide financial services to low-income clients or solidarity lending groups including consumers and the self-employed, who traditionally lack access to banking and related services. Among the earliest microfinance institutions in the country are, Specialized Financial and Promotional Institution (SFPI), Addis saving and credit institution (ADCSI) and Gasha micro finance institution.

From the analysis and interpretations of this chapter and the above table particularly, one easily comprehend that almost all of the independent variables have significant relationship. The significance level is .001.

CHAPTER FIVE

5. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

This chapter presents summary of findings, conclusions and recommendations based on the analysis made in previous chapter.

5.1. Summary of Findings

The purpose of this research was to determine if there is a correlation between loan repayment and factors like sex of borrowers', age of borrowers', business type of borrowers' etc in SFPI, ADCSI, and Gasha MFIs. To this end, the researcher has conducted a correlation analysis. The following findings are the result of the analysis.

5.1.1. Based on the result of the correlation analysis, gender of borrowers' and loan repayment has a correlation coefficient of 0.950. From this we can conclude that there is a significant positive relationship between gender of borrowers' and loan repayment. The significance level is .001.

5.1.2. Age of borrowers' and loan repayment has a correlation coefficient of 0.876. From this we can conclude that there is a significant positive relationship between age of borrowers' and loan repayment. The significance level is .001.

5.1.3. Marital status of borrowers' and loan repayment has a correlation coefficient of 0.946. From this we can conclude that there is a significant positive relationship between marital status of borrowers' and loan repayment. The significance level is .001.

5.1.4. Educational level borrowers' and loan repayment has a correlation coefficient of 0.885. From this we can conclude that there is a significant positive relationship between educational level of borrowers' and loan repayment. The significance level is .001.

5.1.5. Business type of borrowers' and loan repayment has a correlation coefficient of 0.904. From this we can conclude that there is a significant positive relationship between business type of borrowers' and loan repayment. The significance level is .001.

5.1.6. Business experience of borrowers' and loan repayment has a correlation coefficient of 0.905. From this we can conclude that there is a significant positive relationship between business experience of borrowers' and loan repayment. The significance level is .001.

5.1.7. Repayment culture of the society and loan repayment has a correlation coefficient of 0.875. From this we can conclude that there is a significant positive relationship between repayment culture of the society and loan repayment. The significance level is .001.

5.1.8. Loan disbursement lag and loan repayment has a correlation coefficient of 0.857. From this we can conclude that there is a significant positive relationship between loan disbursements lag and loan repayment. The significance level is .001.

5.1.9. Terms and schedule of repayment and loan repayment has a correlation coefficient of 0.818. From this we can conclude that there is a significant positive relationship between Terms and schedule of repayment and loan repayment. The significance level is .001.

5.1.10. Group based lending/solidarity group and loan repayment has a correlation coefficient of 0.858. From this we can conclude that there is a significant positive relationship between group based lending/solidarity group and loan repayment. The significance level is .001.

5.1.11. Weak supervisions before and after loan issued and loan repayment has a correlation coefficient of 0.837. From this we can conclude that there is a significant positive relationship between weak supervisions before and after loan issued and loan repayment. The significance level is .001.

5.1.12. Deficient analysis of project viability and loan repayment has a correlation coefficient of 0.857. From this we can conclude that there is a significant positive relationship between deficient analysis of project viability and loan repayment. The significance level is .001.

5.1.13. Inadequacy of collateral security and loan repayment has a correlation coefficient of 0.924. From this we can conclude that there is a significant positive relationship between Inadequacy of collateral security and loan repayment. The significance level is .001.

5.1.14. Interest rate on the loan and loan repayment has a correlation coefficient of 0.968. From this we can conclude that there is a significant positive relationship between Interest rate on the loan and loan repayment. The significance level is .001.

5.1.15. Lack of credit information linkage among MFIs and loan repayment has a correlation coefficient of 0.848. From this we can conclude that there is a significant positive relationship between Lack of credit information linkage among MFIs and loan repayment. The significance level is .001.

5.1.16. Lack of Appropriate client screening and loan repayment has a correlation coefficient of 0.837. From this we can conclude that there is a significant positive relationship between Lack of Appropriate client screening and loan repayment. The significance level is .001.

5.1.17. Lack of appropriate training to customers before and after the loan issued and loan repayment has a correlation coefficient of 0.840. From this we can conclude that there is a significant positive relationship between Lack of appropriate training to customers before and after the loan issued and loan repayment. The significance level is .001.

5.2. CONCLUSION

The micro finance industry focuses on delivery financial services that meet the needs of poor and help them in their struggle to alleviate their poverty, as well as strengthen the food security program. The financial services provided by the industry include short to medium-term loans and saving products, as well as transfer of fund for a variety of government organizations like payment of pension funds.

The largest asset of Microfinance institutions' is their loan portfolio. At the same time their loan portfolio is also their largest source of risk because of unpaid. For MFIs whose loans are typically not backed by collateral, the quality of the loan portfolio is absolutely crucial.

Loan portfolio quality is subject to various factors. Identifying and clearly comprehending these factors play a vital role to ensure loan portfolio quality of any micro finance institution. Numerous studies conducted in the area of loan and loan repayment in Micro finance Institutions emphasize that loan portfolio quality is subject to various individual and institutional characteristics and the ability of the Micro Finance Institution to identify and work on each and every determinant factor is a must to ensure the sustainability of the institutions.

This study has attempted to determine the relationship between loan repayment and a number of Individual and Institutional factors affecting loan repayment at SFPI, ADCSI, and Gasha MFIs. It is the researcher's firm belief that the findings of this study would be used to better educate the MFIs about the benefits of focusing and intensively working on factors that would have strong relationship with loan repayment.

5.3. Recommendations

Based on the research findings and conclusions the followings are recommended for MFI, in order to address, the determinant factors of loan repayment and to improve its quality more than before. As described in the findings both the individual or borrowers' and institutional factors are found having a positive significant relationship with loan repayment.

Borrowers' Specific Factors

The individual borrowers' specific factors identified at the early stage of this paper are found having a strong positive relationship with loan repayment. Therefore, the researcher should recommended that the Microfinance institutions should give due attention to such independent variables (sex, age, marital status, educational level, business type, work experience in the business and the society of loan repayment culture). Furthermore, MFIs must take in to account each independent variables before issuing loans to borrowers in order to keep and improve the loan repayment and to assure their sustainability both financially and operational as well as to achieve their vision and mission.

Institutional (MFIs) Specific Factors

Since, MFIs need to keep and improve their quality of loan repayment, They should give due attention to institutional factors those are affecting loan repayment similar to borrowers specific factors. To address the institutional factors and improve the loan repayment more than ever, the researcher recommended that the MFIs to use the following strategies.

Provision of guarantee for credit facility

Since, the microfinance institutions target clients are the low income class of the population, who have no access loan from commercial banks, they provide the loan or credit by using the group collateral by organizing severally and individually guarantee without pledged any property to secure the loan. So that, because of lack of property registered, if one or more of the group members not paid their loan the other members of the group becomes defuel to take the responsibility equal share. Now a day, this is big headache of the MFIs to keep the loan repayment. So that, the MFIs to secure their loans they should use additional loan guaranty in addition to group guaranty. These may be registration of the property of each group members, improving the compulsory or mandatory saving of each group members and not allowed to

withdraw before the loan fully repaid, take registration and hold the borrowers land owner books in order to improve the loan repayment activity..

Establish and use of credit information bureau

In the case of our country current situation, no credit information bureau is available for microfinance institutions just like the commercial banks to check credit information and borrower personal history related to loan and to exchange the clients list and their family members as well as the defaulter clients list to protect clients from over indebtedness and to improve the loan repayment. Therefore, the researcher recommended that the MFIs, the national bank of Ethiopia as well as the government of the country should give due attention for this credit information bureau should establish and functional to solve the loan repayment problem.

Training courses for clients, loan officers and managers

The researcher found that, the institutional independent factors (loan disbursement lag, terms and loan repayment schedule or period, weak supervision before and after the loan issued, deficient analysis of loan project viability, lack of appropriate client screening or poor client screening and lack of appropriate training to customers before and after the loan issued) have a significant effect on loan repayment. Hence, the researcher recommended that the microfinance institution should give the training for loan officers and branch managers about the institutional independent factors (loan disbursement lag, terms and loan repayment schedule or period, supervision before and after the loan issued, analysis of loan project viability, appropriate client technics and appropriate training to customers before and after the loan issued and also the training must provide to the client or customers before and after the loan issued the loan repayment to be well effective and improve loan repayment.

Effective and regular monitoring

Since, effective and regular supervising and monitoring is the pillar point for loan repayment as per the schedule so that the researcher recommend that the MFIs clients or customers must regularly supervised and monitoring before and after the loan disbursed by the concerned MFIs staffs to improve the loan repayment.

Fix competitive loan interest rate

The researcher found that, the interest rate to the loan has as significant effect on loan repayment. Then, the MFIs to be competitive in the market and improve the loan repayment fix affordable loan interest rate.

For further research

In this study attempted to assess of determinant factors of loan repayment in MFIs in Ethiopia the case of selected microfinance institutions: An empirical study on these selected MFIs had studied and some recommendations are forwarded based on the findings and conclusions. However, those the determinant factors for loan repayment are the best but not the last or the least. There may be other determinant factors for the title so that it is the opportunity of the MFIs or other researchers to conduct further study even if, they can investigate in detail by taking the single determinant factors of the loan repayment used in this thesis.

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Annex:-1

**ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF MANAGEMENT**

Dear respondents

This questionnaire is prepared to branch managers and loan officers of sample MFIs. The objective of the questionnaire is to collect information about the determinant factors of loan repayment MFIs in Ethiopia. The questionnaire is meant for data collection for academic study. Your response to this questionnaire will be highly appreciated and treated with utmost confidentiality. Please put “√” mark where best represents your answer.

I kindly request a candid answer so that the study reflects the fact.

Thank you in advance for your cooperation!!!

Part one: Demographic Information

1. Your current Position

☐ Branch Manager ☐ Loan Officer

2. Level of education

☐ Diploma ☐ First Degree ☐ Second Degree ☐ Above second degree
☐ Below diploma

3. Work experience in the MFIs

☐ 1-5 years ☐ 6-10 years ☐ 11-15 years ☐ More than 15 years

Part two: Determinants of Loan Portfolio Quality

In this part potential determinant factors having effect on loan repayment in MFIs in Ethiopia are listed below. Please read each factor carefully and evaluate the contribution of each determinant factor for loan portfolio quality based on your practical experience in the Micro-Finance business. Please put a tick mark “√” where best represents your answer.

S/ N	Determinant factors	Agreement Scale					Remark
		Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	
1	Sex of borrowers						
2	Age of borrowers						
3	Marital status of borrowers						
4	Educational level of borrowers						
5	Business types of borrowers						
6	Business Experience of the borrowers						
7	Repayment culture of the society						
8	Loan disbursement lag						
9	Terms and schedule of repayment						
10	Group based lending/solidarity group						
11	Weak supervisions before and after loan issued						
12	Deficient analysis of project viability						

13	Inadequacy of collateral security						
14	Interest rate on the loan						
15	Lack of credit information linkage among MFIs						
16	Lack of Appropriate client screening						
17	Lack of appropriate training to customers before and after the loan issued						
18	Rate of loan repayment depends on the preceding factors						

Thank you Very Much!!!!

Annex:-2

Interview Questions

Dear Sir/Madam,

My name is Dereje Sinishaw, a student at Addis Ababa University Department of Management. Currently, I am conducting a study as a partial fulfillment of the requirement for my master's degree. This is being conducted in order to assess the determinant factors affecting loan portfolio quality in Micro finance institutions.

The information obtained from this session will be kept confidential and used only for research purpose.

I kindly request a candid answer so that the study reflects the fact. Thank you!!!

Shall we start?

1. In your opinion and industry experience, what are the major factors affecting loan portfolio quality of MFIs?
2. Do you really think gender of borrowers' has a relationship with loan repayment? If yes, how?
3. Do you really think age of borrowers' has a relationship with loan repayment? If yes, how?
4. Do you really think education level of borrowers' has a relationship with loan repayment? If yes, how?
5. Do you really think marital status of borrowers' has a relationship with loan repayment? If yes, how?
6. Do you really think business type of borrowers' has a relationship with loan repayment? If yes, how?
7. Do you really think business experience of borrowers' has a relationship with loan repayment? If yes, how?
8. Do you really think repayment culture of the society has a relationship with loan repayment? If yes, how?

9. Do you really think loan interest rate has a relationship with loan repayment? If yes, how?
10. Do you really think supervision has a relationship with loan repayment? If yes, how?
11. Do you really think training before and after loan has a relationship with loan repayment? If yes, how?
12. Do you really think loan disbursement lag has a relationship with loan repayment? If yes, how?
13. Do you really think terms and the schedule time of the loan repayment has a relationship with loan repayment? If yes, how?
14. Do you really think group lending system has a relationship with loan repayment? If yes, how?
15. Do you really think poor analysis of the borrowers' project feasibility has a relationship with loan repayment? If yes, how?
16. Do you really think inadequacy of the loan collateral has a relationship with loan repayment? If yes, how?
17. Do you really think lack of credit information linkage among MFIs has a relationship with loan repayment? If yes, how?

Thank you very much!!!