ASSESSMENT OF THE DETERMINANT OFLOAN REPAYMENT PERFORMANCE OF MICRO FINANCE INSTITUTIONS. (IN CASE OF AGGAR MICRO FINANCE SHARE COMPANY)

SCHOOL OF GRADUATE STUDIES

BY

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Approved by Board of Examiners

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Declaration

I, the undersigned, declare that this thesis is my own work and has never been presented in any other university. I have carried out the research work independently with the support of research advisor. All sources of materials used for this thesis have been properly acknowledged.

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Abstract

Microfinance institutions in Ethiopia are playing an important role in poverty reduction strategies to support lower income group ,to get funds to their business activities and to improve their lives to address the main objectives of the study, Aggar Microfinance were selected for the study purpose. The objective of this study looks to analyze and identify the determinants of loan repayment performance. Studies showed that there are many socio-economic and institutional factors influencing loan repayment performance in the MFIs. AMFSC is among the pioneer MFIs in the country providing services in and around the capital city, which also experiences considerable problem of default so that, to fill this gap. This study was aimed at examining socio economic factors that determinant of loan repayment performance in AMFSC. The researcher were used open end and close end questionnaires, 120 sample borrowers were selected from the total of 1557 borrowers served by the selected micro finance. A descriptive analysis was employed. Under this method of data analysis, descriptive statistics including mean, standard deviations, frequency, percentage, t-test, p-values chis-square test statistics etc. were used to compare defaulter and non–defaulter groups with respect to some explanatory variables. Ordinary least square (OLS) regression model used to study identify the dependent variables affects the loan repayment performance.

Key words; *loan repayment, Defaulter, non-defaulter descriptive statistics, ordinary least square*

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Acronyms

AMFSC	Aggar micro finance Share Company
MFI	Micro finance institutions
NGO	Non-governmental organization
PAR	Portfolio at risk
PD	Probability of defaults
SME	Small and micro enterprise
NBE	National bank of Ethiopia
NGO	Non-Government Organizations
WEDP	Women Entrepreneur Development Program
LLR	Loan Loose rate
WOR	Write off Ratio

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

The MFIs provide funds for start-up business or for working capital purpose such as to buy raw materials, machine and business equipment. etc Loan repayment performance in developing countries has become a major problem in agricultural credit administration, especially for smallholders who have limited collateral capabilities. As a result of the high default rate among borrowers, lending institutions are reluctant in advancing loans to borrowers.

Repayment performance thus serves as a positive signal for increasing the volume of credit availability to various sectors of the economy (Acquah & Addo, 2011). However, certain factors are considered before it is availed to the beneficiary and one of such factors is the beneficiaries' ability to repay the loan which in turn is also determined by many factors. According to Ugbomeh, Achoja, Ideh and Ofuoku (2008), credit repayment performance could be influenced by a myriad of factors such as interest rate, and the social relations and responsibilities of the borrower. The sustainability of micro institutions depends largely on their ability to collect their loans as efficiently and effectively as possible. In other words, to be financially viable or sustainable, micro institutions must ensure high collection quality based on full repayment, or at worst low delinquency/default, cost recovery, and efficient lending. The incremental default rate has been one of the major problems for all the financial institutions.

However, in the recent studies, fikirte (2017) and Abreham Garomsa(2017were identified The s socio-economic variables included gender, educational level, household income and characteristics of the business (type of business, years in business, etc.). and various institutional faors affected the repayment of loan.

Aggar Micro Finance Share Company (AMFSC)

Aggar micro finance Share Co. is one of the largest MFIs, which is operating in Addis Ababa Ethiopia. It was established in 2009 for the provision of financial services to active poor people in Addis Ababa for both micro business and small business operators. According to the revised proclamation No. 626/2009, the general objective of AMFSC is to collect deposits and providing

loans to rural and urban people, as well as micro and small-scale rural and urban entrepreneurs. Its specific objectives are:

- Provision of loan and saving services for micro and small enterprises
- Enhance the development of micro and small enterprises;
- Give priority to women in the provision of financial services;
- Enhance the culture of saving of the target group and the public at large.
- Generate long term self-employment
- Assure financial and operational self sufficiency of the institution.

Aggar micro finance s.co is a microfinance institution, which is engaged according to national bank of Ethiopia proclamation number 626/2009 the objective of the company is to provide financial services for people who engaged in small and micro business and who provide in income generating activities and serving those people which lives in urban and rural area.. AMFSC mainly provides loan and saving services to micro and small enterprise and, provision of financial services for low income and medium income people who are capable to work in income generating activities. Micro enterprises are decisive financial institution in poverty alleviation, through employment making and income generation for low income groups with limited opportunities. Its corporate objective is to promote micro and small enterprise to alleviate poverty and unemployment.

Aggar micro finance is the first commercial private micro finance in the country and started its operation in April 18/2004 it was initiated by Ethiopian shareholders to address the "missing middle" as often called i.e. The MESE'S The founders envisioned to address both social and profitability objectives to accomplish the mission and objectives of the institution was established by 443 shareholders with paid up capital of birr 4,263,600.00 currently its shareholders grew to more than 750 it’s paid up capital to more than 410 million (agar micro company 2017).

Aggar micro finance s.co provides financial services loan and saving for its clients some of services and products are as follows

Loan services and products are:

	Loan size	Loan term	Purpose
Agricultural loan	8,000-15,000	12 months	To serve the farmers outside A.A
WEDP loan	20,000-700,000	Up to 36months	To serve women's entrepreneur Who lives A.A ,Hawasa and Adama
General (consumption) loan	20,000-30,000	Up to24 months	
Micro business loan	20,000-50,000	Upto24months	Designed for salaried workers
Small business loan	50,000-500,000	Up to 36months	For licensed small business operators
Construction loan	15,000-25,000	12 months	To build and construct houses for rental purpose and in order to complete the unfinished constructing houses
Energy loan	200,000-300,000	36 months	For energy innovation purpose

Saving products are different which are as follows:

Compulsory saving;-this is a kind of saving clients are saved for the purpose intended to process and before take loans. This saving is not withdrawn until the clients fully pay their loan. Clients saved the loan amount of 4%-10% according to different loan products as mentioned the above. And clients will get 7% interest for the deposit per annum.

Voluntary saving: - this kind of saving product encloses all types of saving customers without restriction and saving clients can save and withdraw any time at office working hours the opening balance is birr 20 and interest rate is 8% per annum.

Special saving :one of the saving product that clients can use to deposit their money to get better interest rate than banks do the opening balance is birr10,000 this saving product is designed to attract loan funds for the company by paying better interest rate 9.5 % per annum

Fixed term (time deposit) saving: which provide for existing and potential customers with the opening balance of for 300,000 and minimum period for one year the interest rate of fixed term

deposit for birr 300,000.00 to 1000,000.00 is11% and for birr above 1000,000 is 12% per annum.so that the above loan and saving products are helping the researchers in order to design the questionnaires, to perform the research generally and to understand the products are helping to meet the objectives of the institution.

1.2. Statement of the Problem

In alleviating poverty and underemployments, microfinance institutions plays an indispensable role through provision of credit and saving services to the lower income peoples who lack financial services Abraham (cited Fikirte, 2011). Effective repayment performances of microfinance institutions are a requirement for being serving the large and lower income borrowers in a sustainable manner rather than subsidizing through government or donor supports.

Although the provision of financial services to the underserved or non-served poor peoples is the primary objectives of micro finances, an increasing rate of defaulters with large amount of outstanding loan is still the challenges of most microfinance institutions that are operating in Ethiopia. According to the operational reports of some lending microfinance institutions, although slight improvements in repayment performance from year to year were obtained, still there is a gap which required researchers to identify the major factors that undermines repayment performance. Although various studies were revealed their results as socioeconomic features (age, sex, martial statuses, education level) have been identified as factors that can influence loan repayment performances, still identifying individual borrower socioeconomic characteristics and adopting effective lending mechanisms by the lending institutes is the major limitations that most microfinance managements lacks during their operations. Moreover, assessment of the ability and willingness of the borrowers towards repayment of the loan could be the other shortcomings that need researcher attention to enhance repayment performance of borrowers.

A sound understanding of the mechanisms determining loan repayment performance is very useful for microfinance institutions (henceforth, MFIs). Knowing the main repayment determinants, MFIs can identify borrowers with a higher risk of default, thereby allocating loans more efficiently, thus increasing repayment rates. A higher repayment rate is in turn beneficial for both MFIs and borrowers, since MFIs with higher repayment rates can reduce the interest rate applied. Lowering the financial cost of loan and provides opportunity for borrowers to have access to credit (Godquin, 2004). A better understanding of these issues, and of the remaining factors influencing the behavior of the borrowers, can contribute to the development of Microfinance.

The determinants of loan repayment performance have been variously defined and empirically identified in the literature. Bhatt and Tang (2002) list a set of influential factors on the loan repayment performance such as gender, age, experience the borrower has had in the same sector, education, income, business sector, formality of the borrower's business, social ties of the borrower, group homogeneity, payback period, type of loan (cash or in kind), loan size, proximity of the borrower's business to the lending agency, and motivation of the borrower for receiving future loans. Increase loan repayment performance.

Studies show that female borrowers have lower risk of default and consequently have better loan repayment performances compared to male borrowers (Roslan and AbdKarim, (2009) Mokhtaretal (2012) Bennett and Goldberg, 1993). Bennett and Goldberg (1993). However, Godquin (2004) run a study and conclude that female and male borrowers do not show a significantly different repayment performance compared to male borrowers. Besides, loan repayment performance is also found to depend on the age of the borrower (Mokhtar2012). Due to lack of experience, borrowers at the age of 18-25 have higher default risk compared to older borrowers. Borrowers who have more experience in their business usually have better repayment performances since they have a more stable business and more reliable flows of cash and income (Bhatt et al., 2002).

Moreover, research shows that educated borrowers have lower default risk (Nitin 2002; Matin, 1997; Khandker (1995) Bhatt and Tang, 2002). Education supports borrowers in two ways. First, better skills in mathematics and accounting can assist borrowers in their business activities. Second, educated borrowers have higher chance of finding a second job or part time job. So, they can pay back their loans with fewer problems when they face difficulties (Bhatt et al, 2002).

An empirical research study in Pakistan showed that borrowers with primary education enjoy better repayment performance compared to those with no formal education. Education increase borrowers' productivity, and helps borrowers to have a better understanding of the microfinance programs (Chaudhary cited 2003). Due to higher level of complexity of products and services in developed countries, education is particularly relevant for microfinance borrowers who live in these countries (Bhatt et al., 1999). In addition, loan repayment performance varies across different business sectors Chaudhary (2003) show that farmers businesses are easily affected by weather condition while non-farmers' are not. As another example, Sirola (1992) shows that

handymen and street vendors have access to very few sources of credit. So, borrowers involved in informal businesses usually have lower risk of default, because microfinance loans are often the only source of credit they have access to, and they are motivated not to hinder their credit history

Retta (2000, cited in Abafit, 2003) researched that of loan repayment performance borrowers who had other income sources are found to encourage repayment performance while reduced the probability of loan default. While educational level is negatively related to loan repayment

The distance between the borrowers' business and the lending office of the microfinance institution also influences repayment performance. Borrowers who are closer to the lending office have better communications with the MFI. This helps the MFI to provide better assistance in case of necessity. Furthermore, being closer to the lending office borrowers spend less time in commuting, resulting in more time to spend on their own business (Bhatt *et al.*, 2002).

1.3. Objective of the Study

The General objective of the study is assessment of the determinant of loan repayment performance of Aggar micro finance Share Company.

The specific objectives of the thesis project were intended to achieve the following:

To analyze and identify the major socio-economic factors that influence loan repayment rate of the borrowers in AMFSC. The socio-economic characteristics such age, gender, marital status,

Income of the borrowers, training, and distance of the borrowers, educational level, business experience, and loan utilized for business purpose.

To assess difficulties and challenges during the repayment process,

To recommend appropriate measures to minimize defaulters based on the identified factors

1.4. Hypothesis and Research Questions

Ho: Borrowers who are educated, significant influence on loan repayment performance and have positive relationship with the loan repayment performance

Ho: young borrowers significantly influence loan repayment performance and have negative with loan repayment performance

H0: Married borrowers significantly influence loan repayment performance and have appositive relationship with loan repayment performance of the borrowers

H0: borrowers who had taken Training significantly influence loan repayment performance

H0: source of income, loan repayment performance and have appositive relationship with loan repayment performance of the borrowers

H0: loan utilized for business purpose, significant influence on loan repayment performance

H0: business experience, significant influence on loan repayment performance.

HO: proximity (Nearness) of the borrower's business to the lending agency

Significantly influence loan repayment performance of the borrowers

H0: Female borrowers significantly influence loan repayment performance and have appositive relationship with loan repayment performance of the borrowers

H0: loan taken from other institution significantly influence and have a negative relationship with loan repayment performance

This study answers the following basic questions:

Does socio-economic factors such age of the borrowers, gender marital status business experience, educational level loan utilized business purpose etc. that influence loan repayment performance of the borrowers of AMFSC?

Good follow-up and training given for borrowers increased loan repayment performance

What are the major difficulties and challenges during the repayment process in Agaar micro finance?

1.5. Significance of the Study

MFIs are important for poverty reduction and creating employment opportunity especially in developing countries like Ethiopia. One of the key factors for profitability and sustainability of MFIs is the presence of good loan repayment rates. There are a number of socio –economic factors that affect the loan repayment rates. Analyzing such factors and work out and appropriate solutions are essential to expand the activities of MFIs in a sustainable manner. Regarding

AMFSC there has not been any empirical research conducted to identify the main causes of high default rates and to design future strategies. This study tries to provide information for a better understanding on the determinants of loan repayment performance of the AMFSC from both lender and borrowers side. The primary advantage of this study is to establish a knowledge base that enables to makes a sound decision and take corrective action. In addition, the information will be useful for policy makers, other lending institutions and stakeholders.

1.6. Scope and Limitation of the Study

This study covered the repayment aspects of microfinance in the case of AMFSC IT IS focused on the socioeconomic factors that are associated with repayment. Moreover, the data were obtained from head office and out of the 7 branches at AMFSC operates. Those branches are found at Addis Ababa. To reveal the study results which were considered as a limitation was financial constraints and the research represents the images of the overall microfinance branches of Aggar microfinance operating in Ethiopia at large

1.7. Organization of the Study

The remaining parts of the thesis are organized as follows. The third chapter presents literature review the forth chapter an overview data presentation, analysis, and interpretation. The fifth chapter deals with summary of findings, conclusions, and recommendation.

CHAPTER TWO

RELATED REVIEW LITERATURE

2.1. Theoretical Review

What is a Microfinance Institution?

Different authors and organizations have defined Microfinance institutions in different ways. However the essence of the definitions are usually the same in which microfinance refer 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. Arsyad (2005) and Legerwood (1999) defines it as the provision of financial services (generally saving and credit) to low income clients. Robinson (2001) defines it as small scale financial services primarily credit and saving provided to people who farm or fish or herd; who operate small enterprises or micro-enterprises where goods are produced, recycled, repaired or sold; who provide services; who work for wage and commission; who gain income from renting out small amount of land, vehicles, draft animals, or machinery tools; and other individual and groups at the local level of developing countries both rural and urban area. But for this case the definition given by the MIX (Microfinance information exchange) is more appealing than the rest provided in the above paragraph. The MIX (Microfinance information exchange) defines the microfinance institutions as a variety of financial services that target low- income clients, particularly women. Since the clients of microfinance institutions have lower incomes and often have limited access to other financial services, microfinance products tend to be for smaller monetary amounts than traditional financial services. These services include loans, savings, insurance, and remittances. Micro-loans are given for a variety of purposes, frequently for micro-enterprise development. The diversity of products and services offered reflects the fact that the financial needs of individuals, households, and enterprises can change significantly over time, especially for those who live in poverty. Because of these varied needs, and because of the industry's focus on the poor, microfinance institutions often use non-traditional methodologies, such as group lending or other forms of collateral not employed by the formal financial sector.

Characteristics of Microfinance

Microfinance came into being from the appreciation that micro-entrepreneurs and some poorer clients can be 'bankable', that is, they can repay, both the principal and interest, on time and also make savings, provided financial services are tailored to suit their needs. Microfinance as a discipline has created financial products and services that together have enabled low-income people to become clients of a banking intermediary. The characteristics of microfinance products include (Murray.U & Boros.R, pp. 10-11, 2002).

Little amounts of loans and savings.

Short- terms loan (usually up to the term one –three years).Payment schedules attribute frequent installments (or frequent deposits).Installments made up from both principal and interest, which amortized in course of time. Higher interest rates on credit (higher than commercial bank rates but lower than loanshark rates), which reflect the labor-intensive work associated with making small loans and allowing the microfinance intermediary to become sustainable over time. Easy entrance to the microfinance intermediary saves the time and money of the client and permits the intermediary to have a better idea about the clients' financial and social status.

No collateral is required contrary to formal banking practices. Instead of collateral, microfinance intermediaries use alternative methods, like, the assessments of clients' repayment potential by running cash flow analyses, which is based on the stream of cash flows, generated by the activities for which loans are taken

The literature suggests indicators of portfolio quality (Gonzalez, 2007) i.e., portfolio at risk over 30 days, portfolio at risk over 90 days, loan loss provision , write -off ratio and loan loss rate. The first two variables are assumed to measure portfolio at risk and the later three variables are deemed to measure default risk. Following this scenario, the study employed LLR, PAR-30 Days, PAR-90 Days and WOR as proxies for portfolio quality.

Loan loose rate (LLR)

Adjusted Write- offs, net of recoveries / Adjusted Average Gross Loan Portfolio. Loan loss ratio relate to the ratio of amount written off in a period to average portfolio outstanding. The loan loss rate is an indicator to measure un-recovered loans. It is an important indicator to measure portfolio quality. When compared with delinquency rate, the loan loss ratio helps to understand the quality of the portfolio (Nara Hari 2007).

Portfolio at risk (PAR)

It is computed by dividing the outstanding balance of all loans with arrears over 30 days and all refinanced (restructured) loans, by the outstanding gross portfolio as of a certain date (Bulletin, 8, 2012). Since the ratio is often used to measure loans affected by arrears of more than 60, 90, 120 and 180 days, the number of days must be clearly stated (for example PAR -30 days). It shows the portion of the portfolio that is "contaminated" by arrears and therefore at risk of not being repaid. As Jackle (2013) noted that PAR over 30 days is statistically significant driven by its own past trend, size of gross loan portfolio and how it grows, operational self- sufficiency, loss provisioning and write- off policy, amount of female borrowers and the degree of loan monitoring on the micro side and on macro side indicators (inflation rate, the labor force participation rate and depth of financial system as important.

Write-off Ratio (WOR)

It is computed as Value of Loans Written- Off / Average Gross Loan Portfolio. When the MFIs are sure that a loan is not going to be repaid, such loans are written off against the loan loss reserves made. In many cases, MFIs continue to show non recoverable loans as part of the portfolio as they do not have any write-off policy. This is not a good practice as their portfolio loses value over a period of time. A written off policy also help the MFIs to present accurate financial statements; it is always advisable to write-off of the loan which are not repaid over and above a period of one year. If they are received at a later stage this amount can be shown as other income (Nara Hari, 2007). The MFI should continue its efforts to recover the loans even though they are written off from the books. If they are received at the later stage, this amount can be shown as other income.

Several studies have been conducted in different developing countries regarding determinants that affect loan repayment performance. Then illustrations begin by those that focus on loan repayment performances. Acquah and Addo (2011) employed multiple regression analysis in their study about determinants of loan repayment performance of fishermen, Ghana. Their results revealed that low level of education, lack of alternative income generating activity, cumbersome loan processing procedures, they are likely to have high loan default. The study identified fishing income, amount borrowed and size of loan invested into fishing as significant predictors of loan

repayment. Fikirte (2011) studied that the determinants of loan repayment performance with the specific reference of Addis credit and saving institution, Addis Ababa, Ethiopia. TO estimate the effect of hypothesized explanatory variables on repayment performance of borrowers, the weighted logistic model was employed. Her result reveals that age was found to be statistically significant i.e. as age increased; the probability of being defaulter is decreased. She also found that sex, business experience, significant effect on the probability of being defaulter in case of group lending scheme.

Abrham (2002) evaluated and obtained result that having other source of income, education level, work experience in related economic activity before the loan and engaging on economic activities other than agriculture are enhancing loan repayment while loan diversion, being male borrower and giving extended loan repayment period are affects performance of projects negatively. Abafita (2003) studied factors that influence micro finance and loan repayment performance with particular reference to the Oromia Credit and Savings Share Company (OCSSCO) in Kuyu, through the application of descriptive statistics and the probit model, shows 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

The determinants of loan repayment performance have been variously defined and empirically identified in the literature. Bhatt and Tang (2002) list a set of influential factors on the loan repayment performance such as gender, age, experience the borrower has had in the same sector, education, income, business sector, formality of the borrower's business, social ties of the borrower, group homogeneity, payback period, type of loan (cash or in kind), loan size, proximity of the borrower's business to the lending agency, and motivation of the borrower for receiving future loans.

Studies show that female borrowers have lower risk of default and consequently have better loan repayment performances compared to male borrowers Roslan and AbdKarim, (2009) Mokhtar (2012) Bennett and Goldberg, (1993). Bennett and Goldberg (1993) suggest this may happen because women use microcredit as a tool to empower their family economics. However, Godquin (2004) run a study and conclude that female and male borrowers do not show a significantly different repayment performance compared to male borrowers.

Besides, loan repayment performance is also found to depend on the age of the borrower Mokhtar, (2012). Due to lack of experience, borrowers at the age of 18-25 have higher default risk compared to older borrowers.

Borrowers who have more experience in their business usually have better repayment performances since they have a more stable business and more reliable flows of cash and income (Bhatt *et al*, 2002).

Moreover, research shows that educated borrowers have lower default risk (Nitin (2002) Matin, (1997) Khandker (1995) Bhatt and Tang, 2002). Education supports borrowers in two ways. First, better skills in mathematics and accounting can assist borrowers in their business activities. Second, educated borrowers have higher chance of finding a second job or part time job. So, they can pay back their loans with fewer problems when they face difficulties (Bhatt *et al.,* 2002). An empirical research study in Pakistan showed that borrowers with primary education enjoy better repayment performance compared to those with no formal education. Education increase borrowers' productivity, and helps borrowers to have a better understanding of the microfinance programs Chaudhary (2003). Due to higher level of complexity of products and services in developed countries, education is particularly relevant for microfinance borrowers who live in these countries (Bhatt et al., 1999).

Loan characteristics for example repayment period, loan type (in cash or in kind loans), and loan size influence loan repayment performances. If the payback period is too short, *"*the possibility of returns on investment is low in that period. If the repayment time is too long, then borrowers may divert to use extra money on non-productive uses, especially on consumption*" (*Chaudhary, 2003, p. 682). Borrowers who receive loans in kind (such as seeds, fertilizers, equipment, etc.) have better loan repayment compared to borrowers who receive loans in cash. This happens mainly because borrowers may use the loans in cash for non-business related purposes (Okorie, 1986). Larger loan size increases the expected profit of a borrower. This happens because "the net return is an increasing function of the size of the loan, and borrower always prefers bigger loans'" Godquin, (2004). Fremier*et* (1965) demonstrated that by increasing the loan size, the loan repayment deteriorates. Godquin (2004) claims that larger loan size makes it more difficult to pay back the loan over a certain period of time. However, Martin (1997) finds that loan size has not influence on the loan repayment performance.

The distance between the borrowers' business and the lending office of the microfinance institution also influences repayment performance. Borrowers who are closer to the lending office have better communications with the MFI. This helps the MFI to provide better assistance in case of necessity. Furthermore, being closer to the lending office borrowers spend less time in commuting, resulting in more time to spend on their own business Bhatt (2002). Motivation is also among the parameters that affect loan repayment. MFIs generally do not ask for significant collateral, so the main motivation for loan repayment is the borrowers' expectation for receiving future loans Field and Pande, (2008).

Empirical Study on Loan Repayment Performance

Studies in Ethiopia

Berhanu (2005) studied on the determinants of loan repayment performance of smallholder farmers in North Gondar, Ethiopia. In order to analyze the factors that affect loan repayment, he employed the tobit model. A total of 17 explanatory variables were considered in the econometric model. Out of these seven variables were found to significantly influence the repayment performance. These were land holding size of the family, agro-ecology of the area, total livestock holding, number of years of experience, number of contacts, sources of credit and income from off-farm activities. The remaining variables (family size, distance between main road and household residence, purpose of borrowing, loan amount and expenditure for social festivals) were found to have insignificant effect on loan repayment performance of smallholder farmers.

DulaAbebe (2012 cited in Abifia 20003) analyzed the microfinance repayment performance of Oromia Credit and Saving Institution in Kuyu, Ethiopia. According to his finding; sex, loan size and number of dependants are negatively related to loan repayment. On the other hand age was found to be positive, while age squared turned to be negative. Income from activities financed by loan, repayment period suitability and loan supervision are positively and significantly related to loan repayment performance. Moreover, loan diversion is significant and negatively related to loan repayment rate. The negative sign implies that the use of diverted funds for non-income generating purposes. Dula Abebe (2012 cited in Assefa 2005) employed a log it model to estimate the effects of hypothesized explanatory variables on the repayment performance of rural

women credit beneficiaries in Dire Dewa, Ethiopia. Out of the twelve variables hypothesized to influence the loan repayment performance of borrowers, six variables were found to be statistically significant. Some of these variables are farm size, annual farm revenue, celebration of social ceremonies, loan diversion, group effect and location of borrowers from lending institution. Dula (cited in Abreham 2002)) studied on the loan repayment and its determinants in small-scale enterprise financing in Ethiopia around Zeway area. The estimation result has been used tobit model. He found out other sources of income, education, and work experience related economic activities before enhancing loan repayment, while extended loan repayment period is influence the repayment performance negatively. Retta (2000, cited in Abafit, 2003) employed probit model for loan repayment performance of women fuel wood carriers in Addis Ababa. His finding is frequency of loan, supervision, suitability of repayment period and other income sources are found to encourage repayment hence reduce the probability of loan default. While educational level is negatively related to loan repayment.

According to Dula(2012) Age of the borrowers as he has the period from his/her birth to the time of interview and is measured in years. In his studies and hypothesized to influence repayment in the borrowers acquire experience, knowledge of the loan use and accumulate wealth through time which will enable borrowers to effect repayment than younger borrowers.

The number of years of school attained by the respondents up to the time of the survey Educated borrowers will be expected to have more exposure to external environment, to be acquainted with risk management and skills and knowledge through training. Education increases borrowers' ability to get information, a more educated borrower is expected to use the loan effectively as compared to a less educated one. Therefore, under ceteris paribus assumption educated borrowers will be expected to settle their loan timely than illiterate borrowers or clients

Family size it is the total family members of the household in terms of number of persons per household. The larger the family members, the more the labor force available for production purpose, the less the probability to default. Therefore, families with sufficient labor force will be expected to be non-defaulters and families with inadequate labor force will be expected to default

Loan diversion the impact of this Variable depends on what use the diverted loan is put to. If the used for productive purposes than the intended ones then repayment will be enhanced. If on the other hand the loan is diverted to non-productive uses, it will have a negative impact. Sometimes borrowers will use production loan for consumption smoothing purpose as credit is fungible to use not for intended purpose.

Sex of the borrowers

There is a belief among many Microfinance specialists that female are better payers than male borrowers, taking into consideration their being more entrepreneurial that results from assuming more responsibilities in the internal affairs of a household, (Vigano, 1993). Also Khanker et al. (1995) explains that loan repayment rates have been higher for women than for men in the case of Grameen Bank. But some researchers have found the opposite result. So nothing can be said about the sign of this variable

Income from other source some borrowers may have other sources of income like income from employment in government or private organizations of the borrower or other members of the family, pension, etc. Such sources of income are expected to have positive contribution towards loan repayment performance. But if availability of such sources creates carelessness on the part of borrowers in fulfilling their obligation of repayment possibly considering the next loan unnecessary, it may well undermine repayment performance. Hence this variable may assume positive or negative sign

Loan supervision if there is a continuous follow up and supervision visit to evaluate the loan utilization and repayment, this makes borrowers to observe their obligation and improve the proper utilization of the loan thereby improving repayment performance. Therefore, the researcher expects a positive relationship

Empirical Study on Loan Repayment Performance In other countries

Mercy cherotich (2015) many financial institutions that service underserved markets focus on gender when deciding to underwrite a loan, after realizing that female repayment rates are sometimes higher. For example, in a study done on measuring the likely hood of small business default in Community Development Financial Institutions, it was found that Grameen's membership was 94% female by 1992, even though targeting women was not the initial social

mission the essence of social capital was inevitable. This rate can be deceiving because although Grameen claims that women are better borrowers, women may not be significantly different from men when controlling for other factors. Men in most developing countries are the sole property owners The 94% also captures Grameen's preference for working with women rather than men, which is part of their social mission (Coravos, 2010).

Inadequate training

It is vital for the correct handling of the borrower in payment difficulty that relevant staffs are appropriately trained on the policies and procedures of the creditor and are sensitive to the situation of the borrower. This ensures that staff is both knowledgeable and capable of dealing appropriately with the borrower during this difficult and potentially stressful time for the borrower. It is also inevitable that the borrower will have queries on the process to attempt to resolve the difficulties and it is therefore imperative that staff is in a position to answer these queries (Enria, 2013).

Too much Pressure from carrying out numerous work related chores, especially when the credit staff are to achieve unrealistic targets given to them by their superiors, this could lead to a breakdown in ethical judgment. Sometimes the loan officers are not prepared and oriented for their job; this normally hinders their performance since proper training empowers them. Loan officers suffer serious consequences when their clients do not repay. On the other hand, clients also suffer in return in some cases where their property is auctioned to recover the loan principal. With a proper guidance on the ethical orientation, loan officers are sometimes forced to violate their ethical standards while recovering their debt from clients. Treating their clients badly is not a policy but respecting clients is a mantra. But this rule does not always work specially when there is a poor performance of loan portfolio (Sarker, 2013).

Diversion of loans from the intended purpose

The rise in loan delinquency is attributed by the public and private sectors to the diversion of funds away from the original purpose for which they were granted, as well as the misappropriation of funds by borrowers Kanu&Isu, (2014). If a client is given a large loan more than the needs of the business, extra funds may go toward personal use hence when repayments are made, the client cannot pay back without recapitalizing the business Kairu (2009)

In Ghana according to American international journal of contemporary research (vol,4, 2014) The following were the causes of loan default enumerated by the clients: Late disbursement of the loan, business failure, unfavorable payment terms, high interest rate, inadequate loan sizes, unforeseen contingencies, for instance illness and death of a family member, lack of training for the clients before and after disbursement. These confirm the findings of the study by a number of researchers. For instance Okorie (1986) found that time of disbursement is a major cause of loan default among microfinance clients. Secondly Vandel (1993) and Okpugie (2006) in separate studies found that high interest rate charged by microfinance institutions is a major cause of default among the microfinance clients.

Balogun and Alimi (1988) also identified the major causes of loan default as loan shortages, delay in time of loan delivery, small farm size, high interest rate, age of farmers, poor supervision, non-profitability of farm enterprises and undue government intervention with the operations of government sponsored credit programmers.

The MFIs also identified some of the major factors of default/delinquency in MFIs in Ghana to include poor appraisal, lack of monitoring or improper monitoring, improper client selection, diversion of funds on the part of clients, unwillingness of clients to pay, lack of training for the clients, illiteracy and inadequate skills of clients, poor business practices, and macroeconomic factors, poor management styles among others. These factors or causes confirm the findings of the study conducted by Ahmad, (1997), who found that lack of willingness to pay loans coupled with diversion of funds by borrowers, willful negligence and improper appraisal by credit officers are some of the causes of loan default.

According to the study of Determinants of microcredit repayment performance in India the determinants of loan repayment performance have been variously defined and empirically identified in the literature. Bhatt and Tang (2002) list a set of influential factors on the loan repayment performance such as gender, age, experience the borrower has had in the same sector, education, income, business sector, formality of the borrower's business, social ties of the borrower, group homogeneity, payback period, type of loan (cash or in kind), loan size, proximity of the borrower's business to the lending agency, and motivation of the borrower for receiving future loans.

Studies show that female borrowers have lower risk of default and consequently have better loan repayment performances compared to male borrowers (Roslan and AbdKarim, 2009; Mokhtar*et al.,* 2012; Bennett and Goldberg, 1993). Bennett and Goldberg (1993) suggest this may happen because women use microcredit as a tool to empower their family economics. However, Godquin (2004) run a study and conclude that female and male borrowers do not show a significantly different repayment performance compared to male borrowers.

Besides, loan repayment performance is also found to depend on the age of the borrower Mokhtar (2012). Due to lack of experience, borrowers at the age of 18-25 have higher default risk compared to older borrowers.

Borrowers who have more experience in their business usually have better repayment performances since they have a more stable business and more reliable flows of cash and income (Bhatt *et al*, 2002).

Moreover, research shows that educated borrowers have lower default risk (Nitin, (2002) Matin, 1997; Khandker (1995) Bhatt and Tang, 2002). Education supports borrowers in two ways. First, better skills in mathematics and accounting can assist borrowers in their business activities. Second, educated borrowers have higher chance of finding a second job or part time job. So, they can pay back their loans with fewer problems when they face difficulties (Bhatt *et al.,* 2002). An empirical research study in Pakistan showed that borrowers with primary education enjoy better repayment performance compared to those with no formal education. Education increase borrowers' productivity, and helps borrowers to have a better understanding of the microfinance programs Chaudhary (2003). Due to higher level of complexity of products and services in developed countries, education is particularly relevant for microfinance borrowers who live in these countries (Bhatt et al., 1999).

In addition, loan repayment performance varies across different business sectors. Chaudhary (2003) show that farmers businesses are easily affected by weather condition while nonfarmers' are not. As another example, Sirola (1992) shows that handymen and street vendors have access to very few sources of credit. So, borrowers involved in informal businesses usually have lower risk of default, because microfinance loans are often the only source of credit they have access to, and they are motivated not to hinder their credit history.

Other parameters that need to be taken into account are the groups' characteristics and social ties. The distance between the borrowers' business and the lending office of the microfinance institution also influences repayment performance. Borrowers who are closer to the lending office have better communications with the MFI. This helps the MFI to provide better assistance in case of necessity. Furthermore, being closer to the lending office borrowers spend less time in commuting, resulting in more time to spend on their own business (Bhatt *et al.*, 2002)..

According to Microcreditsummit.org [25], as of December 2004, women represented 83% of the poorest clients reported by the 3164 MFIs, which had reached 92,270,289 clients in the State of the Microcredit Summit Campaign of the United Nations. The report reflects that women proved not only to be good clients, but to pay better than men [25,26]. When updating these figures, according to the State of the Campaign Report [6] of the Microcredit Summit Campaign, 82.6% of the poorest clients served were women with 211,119,547 borrowers.

More recently, Abdullah and Quayes [11] report that two thirds of all MFI borrowers have been women; these institutions consistently enjoy high rates of loan repayments and satisfactory financial results. MFIs focus on women as borrowers because they have found that, due to the high rates of reimbursement of microcredit associated with women borrowers, their financial results have improved [11].Several studies have been carried out on the behavior of microcredit reimbursements in specific countries and/or specific MFIs. Hulme [12] studied an MFI in Malawi which replicated the Grameen Bank model and found that reimbursements from women's microloans were 92%, whilst men only reached 83%. In addition, Kevane and Wydick [13] worked on a sample of 342 micro entrepreneurs in Guatemala: The data indicated that women are as capable as men when it comes to managing credit, and that there was evidence those women present rates of reimbursement of credit greater than those of men. Deshpande and Burjorjee (2014) conducted a survey among 29 institutions located in Mexico, South and East Asia, Arab countries, and Eastern Europe, which together had more than 1.6 million clients, of which 60% were women. Deshpande and Burjorjee (2014) pointed out that the MFIs which responded to their survey established that women were better clients from an institutional point of view, and that women were more reliable and punctual clients in the reimbursement of microloans than men. Bhatt and Tang (2002) studied the determinants of loan repayment in microcredit evidence from programs in the United States. Their study showed that women has

low repayment rate because some women entrepreneur in the study might have been engaged in high risk and low return activities. Godquin (2004) also examined the microfinance repayment performance in Bangladesh. His result is female borrowers did not proven to have a significant better repayment performance. The size of loan and the age of the borrower showed the negative impact on the repayment performance. On the contrast, Abraham (2002) showed in his study male borrowers are the undermining factors for repayment.

Zeller (1996) analyzed the determinants of repayment performance of credit groups in Madagascar. His finding is groups with higher level of social cohesion have a better repayment rate. Moreover, the programs that provide saving service to their members have a significantly higher repayment rate. Olagunju and Adeyemo (2007) and Oke et.al. (2007) also analyzed the determinants of repayment decision among small holder farmers in southwestern Nigeria. The result showed that the number of visits made by loan officers to the borrowers, higher level of education, and time of loan disbursement would have a better repayment performance. Moreover, borrowers with lower number of household members would meet their repayment obligation better than those with high number of household members. And having access to business related information and providing training to the clients are increasing the loan repayment rate of the borrowers.

As mentioned above, various studies were conducted on the determinants of loan repayment performance in different countries. Most of these studies were focused on the credit associated with agricultural activities and they identified the socio-economic factors that affect the loan repayment rate of rural household. However, in the literature review nothing was indicated about the factor influencing the loan repayment performance of urban borrowers. Thus, this research could focus on the borrowers who made various types of business in urban area?

In Malaysia, people who are 18 years old to 60 years old are eligible to apply for the micro credit loans offered by the micro finance institutions such as TEKUN and YUM (TEKUN, 2013 and YUM, 2014). In this research, age of borrowers is defined as the age of the borrowers at the time they apply for micro credit loan. (Fikirte, 2011).

In a research conducted by Arene (1993), the age of borrowers are found out to be one of the factors that affect loan repayment default. Other researchers such as Kashuliza (1993), Eze and

Ibekwe (2007) and Wongnaa & Awunyo (2013) have also determined that age of borrowers will affect the loan repayment performance.

Fikirte (2011) has conducted a study on the determinants of loan repayment performance in Addis Credit and Saving Institution in Ethiopia. The researcher found out that age of borrowers has a relationship with loan repayment defaults. The higher the age of borrowers, the lower the rate of loan repayment defaults. According to Shaik (2014), the loan borrowers at younger stages have higher default rates than those who are at older age. The youngsters do not have much experience in managing their wealth and therefore they have higher rate of loan default.

Diversion of Funds by Borrowers

Diversion of funds or loan utilized for other purpose is defined as the funds given to the borrowers are not utilized for the agreed or the intended purpose. Loans are often diverted by the borrowers because of other emergencies like personal use, social ceremonies (wedding), diversion of funds is defined as the loans given to the borrowers are utilized for another purposes rather than the intended purpose. (Rashid, 2014).Researchers such as Walter & Lilian (2013), and Wongnaa & Awunyo (2013) have found out that diversion of funds by borrowers has been one of the factors of loan defaulters. The loan has been utilized for consumption purpose. Rather than used the intended business purpose.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Research Design

The researcher was used both qualitative and quantitative (mixed approach) in collecting and analyzing data. The selection of the one over the other approach for the conducting of the study is based on research problem issue or concern that needs to be addressed. Primary data from the sample respondents in relation to the socioeconomic characteristics of borrowers and other loan related factors from lending institution that influence the repayment performance of borrowers. Whereas, the quantitative data approaches were employed to gather the relevant information from various sources.

In order to precede with the research activities, the researcher defined the loan repayment performance (yi) of each individual sample borrowers of (i^{th}) observation as a dependent variable. meaning the loan repayment performance(y) of the i^{th} borrower have the probability of being valued as either 0 or 1; in order to estimate the model for dependent variable with limited range of values, applying the ordinary least square (OLS) model was chosen to be used for the study purpose because it is simple to estimate the probability of each explaining variables to influence the dependent variable.

3.2. Data Source and Collecting Techniques

To execute the study the researcher was use d both primary and secondary source of data. The primary data gathered from the employees, customers and operation department of Aggar micro finance institutions. The secondary source of data obtained from published and non-published materials AMFSC. The primary data were collected using the structured and unstructured questionnaires to be responded by the selected sample borrowers The Secondary data used for this research was found from borrowers master register books, the year-end audited financial statements and operational reports of the institution

3.3. Method of Data Collection

Data was used for this study from two sources primary and secondary source using questioner from customers. In the questioners, the researcher will use both close- end and open- end questions.

3.4. Sample Technique and Size

Sampling population

The researcher incorporated seven micro finance branches of agar micro finance and the population undergoing to study is 1557 customers of agar micro finance.

3.5. Sampling Frame

The researcher's considered 7 micro finance branches which are found in Addis Ababa city.

3.6. Sampling Techniques

Researcher was used a stratified random sampling technique used to select the respondents. Currently Stratified random sampling is a method of sampling that involves the division of a population into smaller sub-groups known as strata Stratified random sampling allows researchers to obtain a sample population that best represents the entire population being studied The diversification within the strata will be much lesser than the diversification which exists in the target population. Due to the accuracy involved, it is highly probable that the required sample size was be much lesser and that was help researchers in saving time and efforts.

3.7. Sample Size

Stratified sampling technique in the sense that the researcher believed those deliver the best information regarding the determinant of loan repayment performance he preliminary investigation focused on the seven most important services delivery centers in terms of the number of clients. List of loan clients was obtained from the records of the kolfe branch services delivery centers of the micro finance. And sample of 120 clients has taken; the respondents were stratified into two categories, i.e. defaulters and non-defaulters. All borrowers of the microfinance that have repaid their loans when the due date were classified as non-defaulters

while those who did not repay their loan three months after the due date were classified as defaulters.

3.8. Method of Data Analysis

For this research descriptive statistics is one of the techniques were used summarize the data collected from the sample respondents. Frequency, table, mean, median, standard deviation, percentages and also T-test and Chi-square test, probability values and the significance level of each explanatory variable to influence the dependent variable were used for comparing defaulters and non-defaulters were explained and analyzed. In addition an econometric regression model is applied for analyzing the data. Loan repayment is a dependent variable, while different socio-economic and other factors considered as independent variables.

Amount of loan: It is a continuous variable measured by the total amount of money (in Birr) accessed as a loan from the bank. Efficient amounts of loan which equals with the prepared business plan can create conducive environment for the borrower to use it properly and repay it have positive or negative sign.

3.9. Model Specification

Model.1: Loan repayment model

Ordinary Least Square (OLS) regression analytical technique was used to determine the factors affecting the loan repayment performance of the borrowers. The model in the implicit form is specified as:

$z = \alpha o + \alpha i xi + e$ …….. …… …… ……. …… ….. ….. (1)

Where z = amount of Loan Repaid

αo = Constant term of the regression

Xi = Independent Variables (Gender, Age, marital status, Loan utilized for business purpose, Educational level, Training, Business experience other source of income, Distance of borrowers, loan taken from other institution)

αi = Coefficient of Xi input

e = Error Term

Mode2: Loan default model

The Linear Function of multiple regressions was used to estimate the loan default rate:.

$Y = \alpha 0 + \alpha 1x1 + \alpha 2x2 + \alpha 3x3 + \alpha 4x4 + \alpha 5X5 + \alpha 6X6 + \alpha 7X7 + \alpha 8X8 + \alpha 9X9 + \alpha 10X10 + e$ ... (2)

Y = Amount of loan Repaid

α= constant

$\alpha 1 - \alpha\ 10$ = Coefficients of explanatory variables (i.e. X1 – X10)

X1 = Age of respondents (1 =young otherwise=0)

X2 = Gender of respondents (Male = 1, Female = 0)

X3 = Marital Status (Married=1, Single=0)

X4 =loan utilization to spend for business purpose (Yes=1, otherwise=0)

X_5= Educational Level (Number of years in schooling

X6=training given for lenders (Yes=1, otherwise=0)

X7= Business experience (1=Years otherwise=0)

X8 = other source of Income (YES=1, otherwise=0)

X9= loan taken from other micro finance /banks/(yes=0 otherwise=0)

X10= distance of borrowers from the institution (nearly, yes =1 otherwise=0)

e= Error term

CHAPTER FOUR
DATA PRESENTATION ANALYSIS AND INTERPRETATION

4.1. Results and Discussion

Table 4. Demographic and Socio-economic Characteristics of respondents

Variables	Category	Frequency	Percent	Cumulative
Age	**18-29**	**22**	**18.3**	**18.3**
	30-39	**38**	**31.7**	**50**
	40-49	44	**36.7**	**86.7**
	50-59	12	**10**	**96.7**
	60-65	4	**3.3**	**100.00**
	Total	**120**	**100.00**	
Marital Status	**Single**	**25**	**20.83**	**20.83**
	Married	95	**79.17**	**100.00**
	Total	**120**	**100.00**	
Educational Status	**Illiterates**	**7**	**5.8**	**5.8**
	Gradel-8	**12**	**10**	**15.8**
	Grade 9-12	**33**	**27.5**	**43.5**
	Higher Education	**68**	**56.7**	**100.00**
	Total	**120**	**100.0**	
Sex	**Male**	**40**	**33.3**	**33.3**
	Female	**80**	**66.7**	**100.00**
	Total	**120**	**100.00**	
Loan utilization	**For business**	**78**	**65**	65
	For other purpose	**42**	**35**	35
	Total	**120**	**100.00**	100.00
Training given for borrowers	**Training Given**	**78**	**65**	65
	Training Not given	**42**	**35**	35
	Total	**120**	**100.00**	100.00
Business experience	**Business experienced**	**83**	**69.2**	69.2
	Business Starter	**37**	**30.8**	100.00
	Total	**120**	**100.00**	
Other source of income	**Other income**	**69**	**57.5**	57.5
	No other source of income	**51**	**42.5**	100.00
	Total	**120**	**100.00**	
Loan taken from other institution	**Borrowed from other institution**	**39**	**32.5**	32.5
	Not Borrowed from other institution	**81**	**67.5**	100.00
	Total	**120**	**100.00**	100.00
Distance of borrowers from the institution	**Distantly**	**32**	**26.67**	26.67
	Nearly	**88**	**73.3**	73.3
	Total	**120**	**100.00**	100.00

4.1.1 Age compositions

As shown in Table 1, the average age of the borrowers was 38.9 years. Moreover, the mean ages of non-defaulters and defaulters are 36.9 and 39 .9 years respectively. Moreover; from the table, the mean difference between the two groups was statistically significant therefore there was more defaulters around age mean value 36.9 so that, this revealed that relationship between age and defaulters the younger borrowers are more probability of defaulters.

Table 4.1. Age composition of the borrowers

AGE	Mean	Max
Defaulters	**36.9**	**55**
Non defaulters	**40.1**	**62**

4.1.2. Sex of Borrowers

The survey results revealed that 33.3% of the total borrowers were males and the remaining 66.7% were females. From the total - defaulters, 37.5 % and 41.3 % of them were males and females respectively. In addition, 62.5 percent and 58.7 percent of the total non-defaulters were males and females respectively. The difference between the two groups was statistically Significant. So that female borrowers were more likely default than males

Table 4.2.Sex of Borrowers

SEX	**Defaulters**		**Non Defaulters**	
	No.	%	No.	%
Male	**15**	**37.5**	**25**	**62.5**
Female	**33**	41.3	**47**	**58.7**

4.1.3 Marital Status

As shown in Table 3, the survey results showed that 64.57 % of the total borrowers were married and the remaining 28.35 were single. The defaulters, 30 %t and 70 % of them were married and single respectively the difference between the two groups was statistically significant therefore; married borrowers fewer defaulters than single this indicate that married borrowers were more responsible for repaying loan.

Table 4.3: Marital status of borrowers

Variables	Defaulters		Non Defaulters		Total	
Marital	No.	%	No.	%	No.	%
Married	12	30	63	78.7	82	64.57
Single	13	70	17	21.3	36	28.35

4.1.4. Education Level

As shown in Table 4, as shown the table below the mean value of educational level of defaulters and non-defaulters respectively. The difference between the mean values of the two groups was 9.1 and 15.6 statistically significant. However; average grade of defaulters around 12 grades and above but there is deviation of non-defaulters and defaulters

Table 4.4. Education level

Variables		
Educational level	Mean	SD
Defaulters	9.1	5.3
Non Defaulters	15.6	12.5

4.1.5. Loan Utilization

The percentage of borrowers who was utilized loan for business purposes shown below were defaulters and non-defaulters respectively 55% and 45%. The difference between the values of the two groups was statistically significant therefore; defaulters who was utilized the loan for business less defaulters than who was not used for their own business purpose.

Table 4.5. Loan utilization

Variables				
	Defaulters	**%**	**Non defaulters**	**%**
Loan utilization Business purpose	**22**	**55**	**56**	**70**
Other purpose	**18**	**45**	**24**	**30**
Total	**40**		**80**	

4.1.5. Training

As shown in the table below the percentage of training given of business purpose of defaulters and non-defaulters respectively are 37.5% and 62.5%. The difference between the values of the two groups was statistically significant this indicate that borrower who was taken the institution training was not significant defaulters therefore; training is decisive for borrowers.

Table 4.6. Training

Variables	Defaulters	%	Non defaulters	%
Training given	15	37.5	63	78.8
No training given	25	62.5	17	21.2
Total	40	100%	80	100%

4.1.7. Business Experience

As shown in Table 7, below the percentage of loan utilization of business purpose of defaulters and non-defaulters respectively 55% and45%. The difference between the values of the two groups was statistically significant the more experienced borrowers were less defaulters so that business experience is a factor for borrowers in order to default the loan or not .

Table 4.7. Business experience

Variables	Defaulters	%	Non Defaulters	%
Experienced Business	17	42.5	66	82.5
Starter business	23	57.5	14	17.5
Total	40	100	80	100

4.1.8 Loan Taken from other Institution

As shown in Table 8, the table below the percentage loan taken defaulters for other institution and not taken from other institution defaulters was 42.5 % and 57% this indicate that borrowers who was taken loan for other financial institution were more likely default.

Table 4.8. Loan taken from other institution

Variables	Defaulters	%	non defaulters	%
Loan taken from Other institution	17	42.5	25	31.3
Not taken from other institutions	23	57.5	55	68.7
Total	40	100	80	100

4.1.9. Distance of borrowers from the institution

AS shown in Table9 the percentage of loan defaulters near to the financial institution was less defaulters this indicate that loan officers of the institutions is going to follow the business status and loan officers went to the business area and telling them for repaying the loan on time so that this is available for reducing the number of defaulters.

Table 4.9. Distance of borrowers from the institution

Variables	Defaulters	%	non defaulters	%
Distant borrowers	28	70	4	5
Near borrowers	12	30	76	95
Total	40	100		100

4.1.10 Other Source of Income

AS shown the table below and the survey result the percentage borrowers who has other source of income less defaulters borrowers than who doesn't have other source of income the difference between the values of the two groups was statistically significant

Table 4.10. Other source of income

Variables	Defaulters	%	non defaulters
Other source of income	13	32.5	56
No other source of income	27	67.5	24
Total	40	100	

4.2 Coefficient Diagnostic Test

4.2.1 Multi co Linearity Test

Since the dependent variable in this study is binary, testing the existence of multi co linearity is important. It is the nonexistence of multi co linearity among the repressors which means each explanatory variable included in the model should have independent influence on the dependent variable. Multi co linearity problem arises when two or more variables (or combination of variables) are highly correlated with each other. The existence of multi colinearity might cause the estimated regression coefficients to have the wrong signs, smaller t-ratios and high standard errors (Pindyck and Rubinfeld, 1998). According to Gujarati (2003), VIF can be defined as: VIF= Variance Inflation Factor and Ri^2 is the square of multiple correlation coefficients between dependent and the other explanatory variables. The larger the value of VIF the more collinear the variable is. As a rule of thumb, if the VIF of a variable exceeds 10, it is often taken as a signal for the existence of multi co linearity problem in the model.

Multi co linearity clearly shows, values of the VIF was found not to be greater than 10 and all values of the 1/VIF was greater than 0.1 revealing the non-existence of serious multi Co - linearity problem among all the explanatory variables.

Table 4.11. Heteroskedasticity Test

Variance Inflation Factors

Date: 06/04/21 Time: 07:48

Sample: 1 212

Included observations: 212

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	14.69884	19.89141	NA
BUSINESSEXPERIENNCE	4.312078	4.046232	1.240590
DISTANCEOFTHE BORWERS	3.149816	1.990523	1.060986
EDUCATIONALLEVE	0.048273	11.22839	1.151723
FEMALE (GENDER)	3.372115	2.367783	1.139216
LOANUTILIZEDFOR BUS	3.521553	2.607588	1.180795
LOANTAKEN FROMOTHER	3.368644	2.451358	1.133175
MARIED	3.645053	3.303992	1.090941
OTHERSOURCE INCOME	3.530498	2.501530	1.191767
TRAININGGIVEN	3.219042	2.486330	1.067245
AGE(YONG)	3.398864	2.538437	1.137507

4.2.2 Residual Diagnostics

The test of heteroskedasticity is a test of the second assumption of OLS estimator that says the variance of errors is constant. In Breusch-Pagan / Cook-Weisberg test for heteroskedasticity, if the p-value is sufficiently small, that is, below the chosen significance level, then

heteroskedasticity is a problem for the model otherwise heteroskedasticity is not a problem for the model (Wooldridge, 2005). The insignificant result from the Cook-Weisberg test indicates that the regression of the residuals on the predicted values reveals insignificant heteroskedasticity which is a P value greater than 1%, 5% and at 10% levels of significance. Therefore; that there are no hetroskedasticity problemin the model and from the regression result. We will not reject the null hypothesis which is the observed r-squared value is 0.1730

Table 4.12. **Residual Diagnostics**

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.421297	Prob. F(10,201)	0.1728
Obs*R-squared	14.00078	Prob. Chi-Square(10)	0.1730
Scaled explained SS	15.85196	Prob. Chi-Square(10)	0.1039

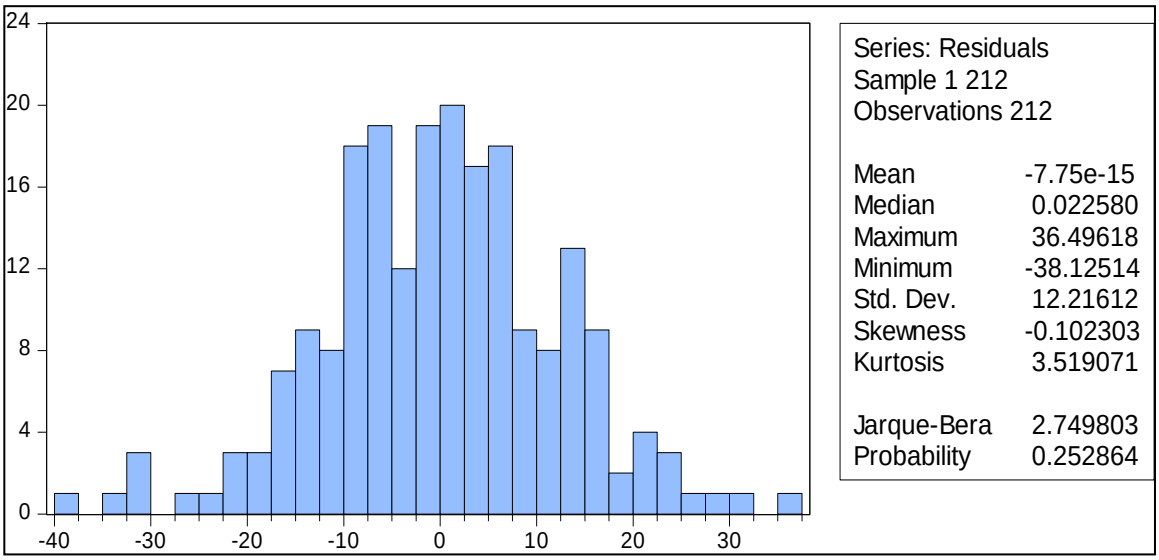
Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 06/04/21 Time: 07:55
Sample: 1 212
Included observations: 212

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	181.4816	71.66914	2.532214	0.0121
BUSINESS EXPERIENCE	-32.29090	38.81808	-0.831852	0.4065
DISTANCEOF THE BORRWER	-32.93494	33.17671	-0.992713	0.3220
EDUCATIONALLEVEL	1.300607	4.107171	0.316667	0.7518
FEMALE(GENDER)	-56.57141	34.32748	-1.647992	0.1009
LOANUTILIZED FOR THE BUS	-35.45682	35.07986	-1.010746	0.3134
LOANTAKENFROMOTHER	55.14307	34.30981	1.607210	0.1096
MARITAL STATUS(MARRIED)	75.12661	35.68968	2.104996	0.0365
OTHERSOURCEOFINCOME	-60.48771	35.12438	-1.722100	0.0866
TRAINING GIVEN	-1.850061	33.53930	-0.055161	0.9561
YOUNG(AGE)	-17.80705	34.46336	-0.516695	0.6059

R-squared	0.066041	Mean dependent var	148.5297
Adjusted R-squared	0.019576	S.D. dependent var	236.2981
S.E. of regression	233.9738	Akaike info criterion	13.79879
Sum squared resid	11003496	Schwarz criterion	13.97295
Log likelihood	-1451.672	Hannan-Quinn criter.	13.86918
F-statistic	1.421297	Durbin-Watson stat	1.616561
Prob(F-statistic)	0.172838		

4.2.3 Histogram Normality test

According the Jarquebera test statistics the observed value of skewness should be 0and the value from test statistics is about -0.1 so that I would concluded that it is symmetric and which is nearly zero and, kurtosis value as a rule of thumb about 3.0 from had been obtained the regression value and the diagram below showed as be 3.5 and I would suggest that which is a bell shaped and it is a positive number which is leptokurtic distribution and the probability value is above 5% which is 25. 28% from this result the data is normally distributed



4.2.4 Stability Diagnostics Test

Ramsay Omitted Variable Test

According to Ramsey omitted variable test to test whether the relationship between loan repayment performance and the dependent variables (explanatory variables) is linear or not there is no evidence fornon-linearity in the regression equation the p value indicate that the test statistics significant at 10% and at 5% level By observing the F-statistics, t-statics and likelihood ratio from the given table below F statistic value is 1.102 and with the p-value 0.2951, t-statistic value is 1.0449 with the p-value 0.29151 and likely hood ratio value is 1.16495 with p-value of 0.2804 and it is suggesting that the null hypothesis cannot be rejected Which is there is no evidence of non-linearity existence in the model.

Table 4.13. Ramsey RESET Test

Ramsey RESET Test

Equation: UNTITLED

specification: loan repayment performance c business experience

distance of the borrower educational level age

Loan utilized for the business loan taken from other institution

married other source of income training given young

Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	1.049779	200	0.2951
F-statistic	1.102036	(1, 200)	0.2951
Likelihood ratio	1.164951	1	0.2804

F-test summary:

	Sum of Sq.	Df	Mean Squares
Test SSR	172.5554	1	172.5554
Restricted SSR	31488.30	201	156.6582
Unrestricted SSR	31315.75	200	156.5787
Unrestricted SSR	31315.75	200	156.5787

LR test summary:

	Value	Df
Restricted LogL	-830.8982	201
Unrestricted LogL	-830.3157	200

Unrestricted Test Equation:

Dependent Variable: LOAN REPAYMENT PERFORMANCE

Method: Least Squares

Date: 06/04/21 Time: 08:06

Sample: 1 212

Included observations: 212

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	32.48445	19.21588	1.690500	0.0925

BUSINESS EXPERIENCE	0.862753	3.607886	0.239130	0.8112
DISTANCE OF THE BORRWER	0.519849	4.332991	0.119975	0.9046
EDUCATIONALLEVEL	0.007043	0.222275	0.031686	0.9748
FEMALE (GENDER)	-0.767982	4.757954	-0.161410	0.8719
LOAN UTILIZED FORTHE BUS	0.746358	5.054650	0.147658	0.8828
LOANTAKENFROMOTHERINS	-0.811355	5.611438	-0.144590	0.8852
MATITAL STATUS(MARIED)	0.807588	3.805296	0.212227	0.8321
OTHER SOURCE OF INCOME	1.056438	5.994381	0.176238	0.8603
TRAINING GIVEN	0.815203	4.822880	0.169028	0.8659
AGE(YOUNG)	-0.325526	3.936660	-0.082691	0.9342
FITTED^2	0.007001	0.006669	1.049779	0.2951

R-squared	0.416649	Mean dependent var	62.08491
Adjusted R-squared	0.384564	S.D. dependent var	15.95053
S.E. of regression	12.51314	Akaike info criterion	7.946375
Sum squared resid	31315.75	Schwarz criterion	8.136370
Log likelihood	-830.3157	Hannan-Quinn criter.	8.023166
F-statistic	12.98604	Durbin-Watson stat	1.606865
Prob(F-statistic)	0.000000		

4.2.5. Goodness of Fit Test Statistics

Is used to express how well the regression model actually fits the data. In other words, it is desirable to have an answer to the question, 'how well does the model containing the explanatory variables that was proposed actually explain variations in the dependent variable?' statistics are available to test how well the sample regression function (SRF) fits the data that is, how 'close' the fitted regression line is to all of the data points taken together.

R^2 value must always liebetween 0 and 1 R^2 essentially makes it impossible to use as a determinant of whether a given variable should be present in the model or not. But rather adjustedR^{-2} be used as a decision-making tool for determining whether a given variable should be included in a regression model , with the rule being: include the variable if R^{-2}rises and do not include it if R^{-2}falls. From the regression result as shown below as independent variable included in the model adjusted R^{-2} will be increased slightly. So that the value of R-square and adjusted R-squared are 0.089567, 0.085231 respectively so that from this observation we concluded that no goodness of fit problem in the model.

4.2.6. Results of Regression Analysis

Table 4.14. Regression result

Dependent Variable: LOAN REPAYMENTPERFORMANCE

Method: Least Squares

Date: 06/04/21 Time: 07:47

Sample: 1 212

Included observations: 212

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	52.25151	3.833906	13.62879	0.0000
BUSINESS EXPERIENCE	3.960392	2.076554	1.907194	0.0579
DISTANCEOFTHE BORRWER	4.669676	1.774772	2.631142	0.0092
EDUCATIONAL LEVEL	0.042760	0.219711	0.194620	0.8459
FEMALE (GENDER)	-5.375988	1.836332	-2.927569	0.0038
LOANUTILIZEDFORTHE BUS.	5.673582	1.876580	3.023363	0.0028
LOANTAKEN FROM OTHER	-6.378282	1.835387	-3.475171	0.0006
MARIED(MARTIAL STATUS)	4.263431	1.909202	2.233096	0.0266
OTHER_SOURCEOF INCOME	7.032244	1.878962	3.742622	0.0002
TRAINING GIVEN	5.514973	1.794169	3.073832	0.0024
YOUNG(AGE)	-3.977211	1.843601	-2.157306	0.0322

R-squared	0.413434	Mean dependent var	62.08491
Adjusted R-squared	0.384252	S.D. dependent var	15.95053
S.E. of regression	12.51632	Akaike info criterion	7.942436
Sum squared resid	31488.30	Schwarz criterion	8.116598
Log likelihood	-830.8982	Hannan-Quinn criter.	8.012828
F-statistic	14.16725	Durbin-Watson stat	1.617492
Prob(F-statistic)	0.000000		

1. **Age of borrower:** The coefficient of this variable. Was hypothesized to have positive sign but from the regression result the age variable was negatively and significantly influencing loan repayment at 5% and 10% significant level. This implies that younger borrowers were more defaulters than older borrowers is agreed with the findings of Medihin,(2015) and yakob (2010) young borrowers were more delinquent than older borrowers. And fikirte (2011) suggested as age increased the probability of being defaulters decreased. This result in line with prior expectation comes up with young borrowers will more default and negative relationship with loan performance and significant result

2. **Sex:** The regression result and from the frequency table implies or as hypothesized female borrowers were negatively related with loan repayment performance. As Abafita (2003) and fikirte (2011) it was argued that female borrowers have more repayment performance that of male the assumptions were female took great obligation and sense of responsibility managing their houses. But my regression result supports Abreham Garomsa(2017) has negative relationship with the loan repayment performance and it is significant at 1% and 5% level therefore; the hypothesis will be rejected.

3. **Marital status:** Martial status of the borrower was an important predictor of loan repayment performance. From regression result it is statistically insignificant. This result is in agreement with findings of the borrowers who were married non defaulters Firafis, (2015) and yakob (2011) this implies that the sign of coefficient the indicated variables positive relation with the loan repayment performance. But the result in contrary with yodit (2017) borrowers who are single may have higher repayment rates significant at 5% and 10% level

4. **Other source of Income:** The coefficient of this variable was hypnotized to influence loan repayment performance positively but availability of other source of income is significant at 5%,and 10% level and surprisingly positive result related to borrowers' ability to repay their loans. Borrowers may be given much attention for the business they have a confidence of repaying their loan on time. This result agree with Abreham (2017) fikirte (2011) and Norell (etal.2001) income from other source such as house rent or diversified income will increase loan performance of the borrowers.

5. **Loan taken from other intuitions:** The coefficient of this variable was influence loan repayment performance negatively. From the regression result borrowers who were taken loan from other institution were a higher probability of defaulters than who are not taken.
6. **Education level** The coefficient of this variable was it is not significant at 1% and 5% influence loan repayment performance even though has a positive relationship with loan repayment performance but statistically insignificant This supports Abreham, (2017 cited) the finding of Michael (2006), Retta (2000) and Fikirte (2011)in his study "Micro-finance Repayment Problems in the informal Sector" in Addis Ababa. Borrower who has attended, primary, secondary or tertiary level education has a lower chance of falling under the default category and increases probability of being under good credit risk category (Ibid).
7. **Business experience** from the regression result business experience is one factor for loan repayment performance as a result has positive relationship with the loan repayment performance. This supports Mulualem (2011) based on the assumption of small business entrepreneur are becoming more knowledgeable in business practices and increases their level of income. And Abreham (2017) the good experienced the borrowers are the more they can succeed their business and repay the loan timely. On the other hand, the less they are experienced the highest the probability of being defaulters. Hence the variable expected to have positive coefficient to influence the probability of being creditworthy borrower.
8. **Training;** those borrowers who had taken training have a positive relationship with the loan repayment performance. The result agree with Abreham (2017) Assefa (2005) and Norel1 (2001) Borrowers who are equipped with relevant trainings and skill developments can effectively manage and monitor the day to day operations of their business. Training has an indispensible contribution to the borrower's business success. Therefore, delivering an adequate and sufficient training to all borrowers Business trainings such as marketing, saving, book keeping etc.in a consistent manner may increase the repayment performance of borrowers. Accordingly, positive sign is expected for this variable.
9. **Distance of the borrowers** from the regression result borrowers from the institution were negative relationship with loan repayment performance. As the borrowers near to the institution the loan officers will follow the business and they will motivate the borrowers to

repay their loan on time than borrowers distantly from the institution this result will support Assefa (2008) but inconsistent with Abafita (2003) and Fikirte (2011)

10. **Loan utilized for business** from the regression result has a positive relationship with the loan repayment performance. This support the assumptions and the result of Yodit, (2017) Borrowers who use the loan for business purpose become productive and generate additional income. The implication is those borrowers who divert the loan finance to consumption will face a shortage of finance to be engaged in income generating activities which finally leads them to be defaulters.

CHAPTER FIVE

SUMMARY, FINDING AND RECOMMENDATION

5.1. Summary

In the study the factors affecting loan repayment performance of the borrowers of Aggar micro finance Share Company data is analyzed using the data collected on the survey result. The primary data is collected from 120 borrowers and 14 years data were used from Addis Ababa city branches only. The sample borrowers were asked different types of questions open ended and close ended the questions were related to the Borrower's characteristics such as age, sex, educational background, marital status, training, loan taken from other institutions business experience distance of borrowers from the institution and availability of other source of income.

A descriptive analysis was employed to analyze socio economic and institutional characteristics of the borrowers. Under this method of data analysis, descriptive statistics including mean, standard deviations, frequency, percentages, etc. were used to summarize and describe the socio-economic and loan characteristics of the borrowers and to compare the defaulters and non-defaulters. In addition, ordinary least square (OLS) regression model was used to econometrically analyze determinants of loan repayment performance mainly using t-test, p-value, and chi-square; in addition to this views software was used to output financial data into useful information.

5.2. Conclusion and Finding

Even though the results of the overall study revealed and discussed in the previous sections of the paper was equally important, the findings were summarized but not limited to the following conclusions and recommendations.

The possible reasoning for the negative coefficient to gender could be female borrowers were defaulters and repayment performance was poor researchers also argued that female borrowers are more defaulters than the counter male Abreham Garomsa (2017).

Borrowers who have other source of income, the probability of being non defaulter's increases by 3.960392at 5%significance level, other things held constant. This argues with what was expected in the hypothesis, and similarly Abreham (2002) and Abafita (2003) reports but the result was in contrary with kibrom (2010) and Medihin (2015) Income from any other diversified sources is expected to decrease the probability of being defaulters

Age of the borrowers is also significant determinant of loan repayment performance. The elder borrowers have taken responsibility to repay their loan. The finding was agreed with Firafis, (2015) but in contrary with the findings of kibrom (2010) and Medihin (2015).

Female borrowers were negatively affects the loan repayment performance of the borrower when the loan repayment performance increased by a unit but the repayment performance of female borrowers decreased by -5.375988 but other things held constant

Provision of appropriate and sufficient training on financial service is very crucial for the success of microfinance activities. According to its training natures, for instance, training on saving mobilization, training on how to keep book of records, loan repayment date, and loan repayment amount contribute a lot on repayment performance and the finding is significant at 5% level.
An institution having diversified loan or giving loan for clients which participates in different sectors of business such as service, manufacturing merchandizing will contribute a lot for loan repayment performance

In additions to the above descriptive and regression analysis results the following have also a considerable impact on repayment performance of borrowers.

Lack of business experience, marketing engagement and negative attitude towards loan service (they are not considered repayment amount paid monthly). Disproportion of loan and income of borrowers or excess loan is given for borrowers were contributed to an increasing number of defaulters.

Micro finance institutions are not using advanced technology for their all services such as borrowing and repayment (cash collection) services as a result this is a problem or to be a major factor that enables borrowers gets successful services and this could not enhance borrower's repayment performances.

Continuous follow up and supervision is decisive for loan repayment performance, there is not enough supervision made by loan officers increases the number of defaulters.

To concluded borrowers; female borrowers or male, martial borrowers or single, educated borrowers or non-educated, business experienced borrowers or not experienced to find out the result whether Defaulters and non-defaulters it depends on and organization behavior and the Result and the conclusion will differ from one organization to another to be studied and the borrower's characteristics (i.e. type of business will engaged by the borrowers).

Finally, the study exceedingly recommends interested researchers to extend further study on "the impact of defaulted amount related to the institution income and profitability."

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Appendices

St's Marry University

Department of Accounting and Finance

Aggar micro finance Sco., Addis Ababa, Ethiopia

Questionnaire

Personal Details

I. Sex: Male☐ Female ☐

2. Education Background: Elementary ☐ Junior ☐ High School ☐

Diploma Degree and above ☐ Illiteracy☐

3. Marital status Married☐ Divorced ☐ Single☐

4. Age: 18-25 ☐ 25-35☐

35-45☐ 45-55☐ 55-65☐

5. Total number of family members (Family size) _____

Age 1- 18Male _____ Female _____

Age 18- 30 Male _____ Female _____

Age30- 40 Male _____ Female _____

Age 41– 60 Male _____ Female _____

Age 61 and above Male _____ Female _____

6. Is your business and residence place similar?

Yes ☐ No ☐

7. Is your residence place near to AggarmicrofinanceS.co?

Yes ☐ No☐

8. Is your business place near to Aggar microfinance S.co?

Yes ☐ No ☐

9. What is/are your sources of income in the household?

- □ From one business
- □ From additional (more) business
- □ From husband/ wife's monthly salary
- □ From more household member salary
- □ Others_____

9. Do you have saving account? □ Yes □ No

10. If yes, where do you save?

- □ Aggar micro finance S.co
- □ Other microfinance
- □ In formal banks
- □ Others_____

11. For what purpose do you save?

- □ For expand business
- □ For personal needs
- □ For consumption
- □ For emergency
- □ For repayment
- □ Others_____

I. Institutional related questions

1. Is the repayment scheme set by Aggar microfinance suitable? □ Yes □ No
2. If No, what are the reasons?
   - □ The starting time to repay is too early
   - □ The repayment period is short
   - □ The amount of repayment in each month is too much
   - □ Others _____
3. What do you suggest to make the repayment scheme suitable?
   - □ To give enough time before starting to repay
   - □ To make the repayment period longer
   - □ Others _____
4. Interest rate for credit set by Aggar microfinance is:
   - □ High
   - □ Medium
   - □ Low
5. What happens if someone does not repay the loan (default)?
   - □ Loss of personal asset
   - □ Loss of loyalty social or friendly relationship with other person
   - □ Losing second time loan/repeated loan
   - □ Others _____
6. Do you know any people who are not repaying the loan? □ Yes □ No

7. If yes, what are the characteristics?

□ Micro borrowers □ Male □ Female

□ Small borrowers □ Male □ Female

□ Consumption borrowers □ Male □ Female

□ Other □ Male □ Female

8. Why would someone not repaying the loan?

□ Lack of follow up by loan officer

□ Weak legal enforcement for defaulters

□ Improper use of the loan

□ Lack of interest for doing business

□ Others_____

9. Did you take training from Aggar microfinance? □ Yes □ No

10. If yes, what kind of training do you take?

□ Business training

□ Training on different microfinance service (credit, saving, insurance)

□ Other _____

11. By whom this training was given?

□ By loan officer

□ By managers

□ By Others_____

12. Was the training useful? □ Yes □ No

13. How many times the loan officer visits your business and checks your repayment status?

□ Two times a month

□ Once a month

□ Once within two month

□ Once within three month

□ Others _____

14. Is the loan and repayment supervision made by one loan officer throughout the process (from loan application to final repayment)?

□ Yes □ No

15. If No, do you know the reason? _____

16. Are you served in a good manner by the loan officer and other employees of Aggar Microfinance?□ Yes □ No

17. If No, what is/are the reason(s)?

- □ There is information gap
- □ The loan officers are busy
- □ The loan officers are not disciplined
- □ Others _____

18. Is your and loan officer motivate you to pay the loan on time? □ Yes □ No

19. If# 18 Yes , this a lot contribute to the loan repayment □ Yes □ No

II. Group lending related questions

1. Are you involved in a group lending?

   □ Yes □ No

2. If yes, why did you engaged in group lending?

   - □ Easy to get loan in a group
   - □ By initiative with one of the group members
   - □ Others _____

3. How many members does the group have?

   □ 3 □ 5□ 10 □ Other

4. How was the group formed?

   □ Based on the group member interest

   □ Based on the loan provider (Addis microfinance) interest

   □ Others _____

5. How many of the group member that you know before?

   - □ All of the group member
   - □ Half of the group member
   - □ One fourth of the group members
   - □ Others _____
   - □ None of them

6. How many of the group members are:

   A. Family members _____
   B. Friends _____
   C. Neighbors _____

7. Do you feel responsibility to the other members of your group related to loan repayment?

   □ Yes □ No

8. If yes, what are the main reasons?

   □ Social capital i.e. trust, cooperation, personal ties

   □ Fear of default

   □ Others _____

9. What actions do you take when the group members didn't repay their loan?

   □ Inform to the loan provider,

   □ Other group member paid for who do not pay

   □ Others_____

III. Business related questions

1. In which types of business currently engaged?

A. Micro business

   □ Service

   □ manufacturing

   □ Trade

   □ Others_____

B. Small business

   □ service

   □ manufacturing

   □ Trade

   □ Others_____

2. How long has your business experience?

   □ 1 year □ 2 years □ 3 years □ 4 years □ others _____

3. Did you conduct market study (survey) before starting your business?

   □ Yes □ No

4. If No, why? _____

5. Are you able to get (access) business information related to your business?

   □ Yes □ No

6. If Yes, how to get this information?

   □ From various media (TV, radio, newspaper, etc.)

□ From friends

□ From the loan provider (Aggar micro finance)

□ Others_____

7. Is your business successful? □ Yes □ No
8. If No, what do you use to repaying your loan?

□ From my personal asset (building, equipment...)

□ From other income source

□ Don't want to repay

□ Others _____

Loan & Repayment related questions

1. Why do you borrow from Aggar microfinance?

□ For doing new business

□ For expanding already existing business

□ Others _____

2. How many times did you borrow from Aggar micro finance S.Co?

□ 1 □ 2□ 3 □ 4 □ Others

3. How long it takes the first application acceptance?

□ One week □ Two week □ One month □ other _____

4. What is/are the reason(s) for these?

□ loan officers are qualified

□ Speedy procedure (short process)

□ Due to long procedure (process)

□ Many people apply for credit at one time

□ The loan officers are not willing to finish within short time

□ Others_____

5. How much money do you borrow from AMFI _____
6. Did you spend the entire loan for running your business? □ Yes □ No
7. If No, for what purpose do you spent?

□ Consumption
□ Education for children
□ Health
□ Others_____

8. Do you take the request amount of loan from Aggar microfinance as you requested?

□ Yes □ No

9. If No, is it □ Lower □ Higher

10. Is the amount of loan taken from Aggar microfinance enough for doing all your business?

□ Yes □ No

11. If No, what solution do you take?

□ Borrow from other Microfinance institutions

□ Borrow from family or friends

□ Borrow from informal money lenders

□ Borrow from formal banks

□ Used by the available amount of money

□ Others_____

12. Did you borrow from other sources for other purposes? If yes for what purpose?

□ consumption □business □ building house □ □ energy □ other

13. If yes, from where do you borrow?

□ Borrow from other Microfinance institutions

□ Borrow from family or friends

□ Borrow from informal money lenders

□ Borrow from formal banks

□ Others_____

14. Which loan do you repaid first and why?

□ Loan from Aggar microfinance?

□ Loan from other Microfinance institutions

□ Loan from family or friends

□ Loan from informal money lenders

□ Loan from formal banks

□ Others_____

15. Are you repaying your loan? □ Yes □ No

16. If yes, what is your repayment status?

A. Fully repaid

□ On time □ Too late

B. Partially repaid

□ On time □ Too late

17. Are you benefited by fully repaying your loan? □ Yes □ No

18. If yes, what are the benefits?

- □ Access to the next higher loan
- □ Build good relationship with the loan provider
- □ To make the family stable
- □ Others _____

19. If your answer is No for # 18, what is/are the reason(s)?

- □ The cost of doing business is higher than the revenue
- □ Weak legal enforcement for defaulters
- □ Low supervision by the loan officer
- □ personal problem (like sick.....)
- □ Improper use of the loan
- □ Others

20. Do you have other/new sources of income currently?

Yes ☐ No☐

21. Do women entrepreneur program will benefit for the loan you took?

Yes☐No☐

22. If your answer is yes for # 21, what is/are the benefit (s)?

- □ The interest rate is lower than other kind of loan
- □ The loan size is higher than other kind of loan
- □ The loan term is higher than other kind of loan
- □ The loan collateral type is easy and affordable.
- □ Others_____

VI. General questions

1. If you face any difficulties and challenges during the repayment process, please mention the major challenges

2. What factors other than those indicated in the questionnaires had seriously undermine your repayment performances?

Appendix 1: Organizational structure of Aggar Microfinance institution (AMFSC, 2019)