

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF COMMERCE
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**FACTORS AFFECTING REPAYMENT PERFORMANCE OF
GROUP CLIENTS OF PACT GLOBAL MICROFINANCE FUND
(CASE STUDY OF MEIKTILA TOWNSHIP)**

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A thesis submitted as a partial fulfillment towards the requirements for the degree of
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ABSTRACT

The objectives of this study are to explore the microfinance services of Pact Global Microfinance Fund (PGMF) and to analyze the factors affecting repayment performance of group-based borrowers. The structured questionnaires are used to collect the primary data. The repayment performance is the dependent variable or the expected outcome of the study, 352 respondents from totally 4249 of group-based borrowers from four units of PGMF in Meiktila are selected with stratified sampling method. Multiple regression analysis is the main analysis to test factors affecting repayment performance. Business skills of borrowers, group liabilities, loan terms and demographic factors are considered as the independent variables of this study. Business skills of borrowers, group liabilities and loan terms are positively relationship with repayment performance, and, among three variables of them, loan term has most positive correlation with that. However, demographic factors are not significantly correlated with repayment performance. Multiple regression analysis showed that business skills of borrowers, group liabilities and loan terms have significantly the strong and positive effects on repayment performance and these variables are important to increase repayment performance. It is suggested that the improvements three factors by group-based borrower and the supports by PGMF, could result in the regular repayment performance with less PAR Ratio.

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LIST OF ABBREVIATIONS

FRD	Financial Regulatory Department
INGOs	International Non-Government Organizations
MEBA	Microfinance for Ecosystem Based Adaption
MFIs	Microfinance Institutions
MIS	Management Information Systems
MMI	Microfinance and Microcredit Information
MMSE	Myanmar Microfinance Supervisory Enterprise
MSMEs	Micro, Small and Medium Enterprise
PGMF	Pact Global Microfinance Fund
UNDP	United Nation Development Programme

CHAPTER I

INTRODUCTION

Since the past decade ago, development practitioners and donor agencies have been focusing on the sustainability of microfinance institutions (MFIs) and poverty reduction using microfinance in the economic development of many developing countries. Microfinance institutions (MFIs) gives financial services related with microfinance that includes deposits, loans, payment services as well as insurance and other financial products targeted at low-income clients (Harris, 2002). According to Josily (2006), the focus is on microfinance as financial services targeted at individuals and small businesses who lack access to conventional banking and related services.

Back to the 18th century, microfinance was started in England and Germany, the movement experienced a boom in the mid-1970s in Bangladesh and Latin America to provide the delivery of financial services for low-income and poor households with limited access to formal financial institutions. From that time, microfinance institutions are today increasingly seen as one component of the broader financial inclusion system not only in Asia but also all around the world. In addition, microfinance institutions also help the developing countries by offering small loans and technical assistance in business development to low-income community. While extending small loan microfinance services, they provide various other financial and non-financial services such as savings, insurance guidance, skill development training, capacity building and motivation to start income generating activities to enhance the productivity of credit (MEBA, 2018).

Microfinance targets to poor people who have lack of collateral, no steady employment and verifiable credit history (MMI, 2016). Besides, it can reduce the risk of illegal banking such as money lenders or loan sharks who charge an unreasonable interest rate. Microfinance institutions further become an increasingly important component of strategies for local entrepreneurs, to promote micro and small enterprise development. Microfinance providers have proved quite crucial in the provision of small formal loans to small business owner who have difficulties in investing in business due to lack of capital.

However, there are number of risks that MFIs have to face despite they provide financial services to promote society (Chetty, 2017). These risks could be of frauds, financial problems, staff turnover, interest rate changes, competition and repayment performance. Among them, one of the main obstacles is repayment performance for institution to continue providing microcredit services. The value of loan repayment efficiency has been emphasized by many researchers. Micro finance uses different methodologies to reach the poor and gives them incentives to pay back loans. There are two credit program individual and group lending exhibit different characteristics among others. The group-based microcredit program allows borrowers who cannot provide collateral, to form their own group where members are mutually liable for each other repayments although loans are provided to individual. Therefore, the intention for the study is to research into the repayment performance of group-base lending techniques. The study also examines factors influencing repayment performance.

1.1 Rationale of the Study

In Myanmar, INGOs developed microfinance projects before November 2010 with the MoU of the government authority. After Political Reforms in 2010, microfinance laws are enacted under the Rural Development and Poverty Reduction Committee. Before 2011, among their charitable activities, only four NGOs were allowed to offer microfinance services. From that time, the FRD listed 176 licensed MFIs in March 2018 in Myanmar (Myanmar Financial Services Report 2018). Pact Global Microfinance Fund (PGMF) becomes a critical part of various types of microfinance institutions to support the society with its financial and non-financial services.

Pact Global Microfinance Fund (PGMF) is an international development organization based in Washington DC, USA, working in 30 countries throughout the world (PGMF, 2019). PGMF is a non-profit, non-religious, non-racial and non-governmental organization. Pact started a microfinance program in Myanmar from 1997 with funding from United Nation Development Programme (UNDP). Pact is registered as an INGO under the Ministry of Home Affairs to institutionalize its microfinance operations in 2012 and acquired a license from Myanmar Microfinance Supervisory Enterprise (MMSE) to implement microfinance in Myanmar. Pact has been implementing microfinance activities in Myanmar's Dry Zone, Shan State, in the Ayeyarwady Delta Region, and Rakhine State. In 2018, PGMF disbursed more

than 1.3 million loans worth \$408 million and operates 72 townships in Myanmar (PGMF 2018). Among these townships, Meiktila is a main area for Myanmar's Dry Zone and is focused by PGMF. With terms of these factors, Pact Global Microfinance Fund established in Meiktila Township as the first microfinance organization and it has been for over six years. And it is a market leader and the most experience microfinance organization among others such as World Vision, AEON and Sathapana Microfinance in Meiktila Township. As these conditions, the study will focus on PGMF in Meiktila Township.

Pact Global Microfinance Fund (PGMF) is the only access to affordable credit available. PGMF gives financial services and non-financial services to the society. In financial services, PGMF provide microcredit loans to individual and group clients (Pact, 2019). From both of two loan types, there is a small part of individual clients rather than group clients who take the loans of PGMF. In addition, group-based loans contribute to the survivals of PGMF and group liabilities can support to hedge its financial risks, rather than individual based loans.

Since PGMF agreed not to take any legal action against defaulters, the only instrument they have against loan defaulters is joint liability, where if any member is unable to repay, other group members cannot borrow unless they assist in repaying debt. In addition, Ghatak (1999) mentioned that group lending programs provide an opportunity for microfinance institutions to distinguish good borrowers from the risky one. In these conditions, some of borrowers have difficulties related with their repayment when they do not have the ability to manage their investment or financial issues, and because of group liabilities and loan terms such as interest rate, payment period, etc. Besides, it is seen that these joint liability features of group-based microcredit services attract the attention of development communities and to improve repayment performance which allows PGMF to achieve institutional financial sufficiency. These conditions force to emphasize the nature of group-based microcredit services of PGMF. Because of these findings, the study will analyse the factors that affect repayment performance the clients of MFIs in Meiktila Township.

As these conditions, repayment performance is becoming important for continuing providing services and sustainability for every microfinance organization. Thus, repayment performance is increasing crucial for Pact Global Microfinance Fund to continue operating in Meiktila Township. Due to these reasons, this research

intends to study factors affecting repayment performance of group-based microcredit programs provided by Pact Global Microfinance Fund in Meiktila Township.

1.2 Objectives of the Study

The objectives of the study are as follows:

- (1) To explore the Microfinance services of Pact Global Microfinance Fund in Meiktila Township, and
- (2) To analyze the factors affecting repayment performance of group clients of Pact Global Microfinance Fund in Meiktila Township.

1.3 Scope and Methods of the Study

The study is the factors affecting loan repayment performance of Pact Global Microfinance Fund in Meiktila Township. Among many kinds of determinants, business skills of borrowers, group liabilities, loan terms, demographic factors are considered as independent variables and loan repayment performance as dependent variable. Although there are group clients and individual clients of Pact Global Microfinance Fund in Meiktila Township, only group clients are considered in the study.

As research design, the study focusses on quantitative research to analyze the identified objectives. The study is carried out with explanatory approach which attempts to clarify why and how there is a relationship between two variables or more for factor affecting repayment performance. Data analysis is conducted with descriptive, reliability, correlation and multiple regression methods in the study. Both primary and secondary data are used. The target population is in the urban region of comprised a total of 4249 in group clients of four units of PGMF. One group include the number of borrowers from 3 persons to 5 persons, depending on their relationship.

The sample size for the study is determined by using the Cochran (1963)'s formula where the population size is 4249 group clients, margin of error is 0.05, and probability of previous similar studies is 0.50 are assumed at 95% confidence level. The sample size of 352 group clients from four units of PGMF are selected with stratified sampling method to ensure that particular strata or categories of individuals are represented. Primary data is collected by conducting personal interviews with the help of questionnaires. Secondary data are obtained from PGMF's branch office,

journals, articles, and previous researches and internet web-site. The required data is collected during one month, December 2019.

1.4 Organization of the Study

This study includes five chapters. Chapter one introduces rationale, objectives, scope and method of the study and organization of the study. Chapter two presents concept and services of microfinance, repayment performance, factors affecting repayment performance and previous research studies, including conceptual framework of the study. Chapter three shows the profile of Pact Global Microfinance Fund in Meiktila Township and its microfinance services. Chapter four analyzes factors affecting group clients' repayment performance of Pact Global Microfinance Fund in Meiktila Township. Finally, chapter five concludes by stating findings and discussions, suggestions and recommendations and needs for further research.

CHAPTER II

THEORETICAL BACKGROUND

This chapter highlights with the theoretical background of microfinance and services of microfinance. Concepts of repayment performance and factors affecting repayment performance are discussed and previous studies are also expressed in this chapter. Conceptual framework is finally presented in this chapter.

2.1 Concept of Microfinance

The word microfinance came into existence and get importance through the revolutionary of Grameen Bank founded by Professor Muhammad Yunus in Bangladesh in 1970s. In 1974, Prof. Muhammad Yunus, the pioneer of microfinance observed that the village women, who made basket from bamboo, borrowed their small capital from local moneylender but as a return the moneylender take maximum portion of the selling price of that basket and the women got only little wages for that. So he thought that if the women may get a small loan in a systematic way then she will be able to get the full selling price of the basket and will be able to improve her standard of living.

In 1999, Otero mentions that microfinance is the provision of financial services to low-income poor and very poor self-employed people. Schreiner and Colombet (2001) also define microfinance as the attempt to improve access to small deposits and small loans for poor households neglected by banks. Koveos & Randhawa (2004) define microfinance as the provision of financial services to low-income clients, including the self-employed. In addition, the various financial services which can be rendered to the poor include savings, credits, insurance, payments and social intermediation. Regarding to Mokhtar & Gilbert (2007), microfinance means financial instruments such as loans, saving, insurance and other financial products that are tailored only to the poor. Microfinance is created in the economy for the economic benefit or the poor and to alleviate poverty. Microfinance

services are delivered to the poor households and society by the institutions, known as microfinance institutions.

Microfinance institution (MIF) means local and foreign institutions, partnership firms. Turnell (2009) argued that companies, co-operative societies, banks and nonbanking financial institutions, formed and registered under the relevant law obtain license to operated microfinance business in order to reduce the poverty of the rural poverty and the development of their socio-economic lives. According to the Myanmar Microfinance Law (2011), microfinance means extending micro-credit to the grass roof people, accepting deposits from them, carrying out remittance, carrying out insurance business, borrowing money local and international and other financial operation.

In 21st century, microfinance provides the responsible financial and non-financial services that enable low-income households to develop their future as microfinance services. Olagunju (2007) & Berhanu (2008) mentions that microfinance services include financial services such as saving, credit, insurance, credit cards and payments systems for their clients. This is effectively to the client demand for liquidity and design product easily understandable for the clients and easily manageable for the institution

Fao (2014) developed that the provision of microfinance services can be facilitated by business development services as nonfinancial services. These services can help build financial and business management capacity of rural households, and provide local support services for enterprises. Enterprise development service is one of nonfinancial services that assist micro entrepreneurs. These include business training, marketing, technology and skills. These services can improve the ability of low-income people to operate microenterprise either directly or indirectly. Social services are also nonfinancial services that focus on improving the well-being of micro entrepreneurs. These include health, nutrition, education, and literacy training.

Based on cash patterns of borrowers, lenders must ensure that borrowers have sufficient cash inflow to cover loan payments when they are due. According to Ledgerwood (1998), there are four types of loan provided by microfinance institution as financial services. They are income generating loan, mid-term loan, emergency loan and individual loan. The loan generating income is used generating income for their families. The mid-term loan is available to clients after 25 weeks of repaying their income generating loan. The emergency loan is available to all clients a fiscal

year. The loan is interest-free and the amount and terms of repayment are agreed on a case-by-case basis by the MFI and the client. The individual loan is intended for clients and non-clients with specific needs beyond the group lending model. Loans are given to an individual outside of the group lending process.

2.2 Methods for Credit Delivery

Besides, microfinance institutions provide credit systems to the persons who are needed finances. Mostly, credit delivery systems can generally be divided into the two broad categories of individual based lending and group-based lending.

Individual-based lending requires greater up-front analysis of clients and their cash flows, sometimes physical collateral, and frequent and close contact during the term of the loan. Loan approvals and amounts are dependent on the qualifications and debt ability of a borrower, which in turn depend on a number of factors, including personal and business characteristics, for example, age, gender, or reputation, sources and amount of income, business size, cash flow, and available collateral. It is most successful for larger, urban-based, production-oriented businesses and for clients who have some form of collateral or a willing cosigner. Individual loans with small farmers can also be effective in rural areas.

In the first one the clients are required to be able to provide the MFI with some form of collateral or cosigner (a person who agrees to be legally responsible for the loan but who usually has not personally received a loan from the MFI). The institution can tailor the loan size and the term to business needs, as the staff develops close relationships with clients so that each client represents a significant investment of staff time and energy (Ledgerwood, 1998). The screening of potential clients is carried out by assessing their individual loan repayment capacity and their willingness to repay.

Group-based lending approach has adapted the model of rotating savings and credit associations to provide additional flexibility in loan size and terms and generally to allow borrowers to access funds when needed rather than having to wait for their turn. More well-known group-lending models include the Grameen Bank in Bangladesh and ACCION International's solidarity group lending, both of which facilitate the formation of relatively small groups (5 to 10 members) and make individual loans to group members. Other models, such as FINCA village banking model, utilize larger groups of between 30 and 100 members and lend to the group itself rather than to individuals (Ledgerwood, 1998).

Several advantages of group-based lending are cited frequently in microfinance literature. One important feature of group-based lending is the use of peer pressure as a substitute for collateral. Many group-based lending programs target the very poor, who cannot meet the traditional collateral requirements of most financial institutions. Instead, group guarantees are established as collateral substitutes. While many people presume that group guarantees involve the strict joint liability of group members, members are seldom held responsible. Instead, the default of one member generally means that further lending to other members of the group is stopped until the loan is repaid. The financial and social grouping elicits several types of group dynamics that may increase repayment rates.

2.3 Previous Study

Various researchers examined determinants of repayment performance of clients in MFIs with many kinds of approaches and sectors to support the survival of MIFs. Abafita (2003) examined the effect of loan size and interest rate on loan repayment performance levels, Godquin (2004) argued that duration of loan, age, loan size, social ties and training impact on loan repayment performance. According to Lilay (2015) conducted that group forming, peer monitoring, loan size, loan term and supervision have significant association with loan repayment performance. Although, many researchers studied various types of factor that are affecting on repayment performance, four previous papers of Bumbie (2013), Bananuka, Nkote & Tumwebaze (2017), Ndege (2017) & Jote (2018) have been focused in the study.

Bumbie (2013) studied group clients and individual clients of two financial institutions namely WACCU and SRB in order to bring to light factors that determine repayment performance. He focused saving, dynamics incentives, monitoring, peer pressure, screening and social ties as independent variables and repayment performance as dependent variables. Multiple regressions were used to depict the determinants of repayment performances in both group and individual lending. Chi-square test was used to determine the strength of the relationship between individual and group lending methodologies. In his study, repayment performance is positively significant with saving and screening, while negatively significant with monitoring.

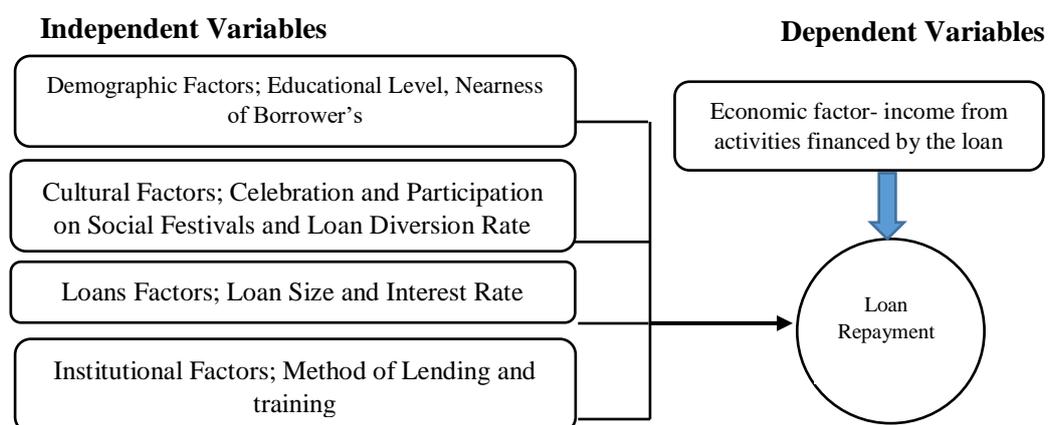
Bananuka, Nkote & Tumwebaze (2017) analyzed the influences of borrower characteristics and credit terms on repayment performance in rural areas of Uganda.

Data were obtained by a survey of 51 MFIs in Uganda. Regression analysis was mainly used in their study. But this was found that credit terms (interest rate, loan period and collateral), rather than borrower characteristics, have positively significant with loan repayment performance. Credit terms are studied with interest rate, loan period and collateral, and borrower characteristics are measured with age, marital status, income level and savings of clients.

In addition, Ndege (2017) examines determinants of repayment of group loans amongst microfinance institutions in Nakuru County, Nakuru Town, Kenya. Inferential statistics such as correlation, regression and one-way ANOVA is focused to test the data. He discovered that there is positively significant with joint liability and demographic factor whereas negatively significant with business skill and loan repayment term. In his study, business skills are measured with cash flow management, monitoring and evaluation and customer services; joint liability are measured with pressure to pay, credit rating, monitoring, social ties and teamwork related with group; loan repayment terms are represented with interest rate, frequency of payment, fines and penalties, loan repayment period and loan amount; and demographic factors are studied with gender, age, marital status, education level and employment status.

In 2018, Jote examined the determinants of loan repayment in MFIs in Gedeo zone, SNNPRS, Ethiopia. Jote collected data from primary and secondary sources and analyzed by using binary logistic model and using stratified random sampling from borrowers by dividing the borrowers in to two strata, in terms of the default and non-default status of the loan payment. Linear probability model and linear regression analysis were mainly used in his study. Jote expressed that educational level, method of lending, nearness of borrower's residence to the institutions, family size, and income from activities financed by loan and training are statistically significant to influence the probability of loan repayment.

Figure (2.1) Conceptual Framework of the Previous Study



Source: Jote (2018)

Based on these four previous studies, the study focus on factors affecting repayment performance with four variables: business skills of borrowers, demographic factors, group liabilities and loan.

As first variable, the business skills have a critical influence on the repayment of the group loans in the context that most of the loans are meant for business activities (Angaine & ari, 2014; Muli, 2016). In the study, the respondents are managers, employees, owners of grocery. Like them, most of farmers are included in the study. In farm management, farmers organize necessary resources and develop the best to their farms with their management skills so that they want to gain return on their investment. If the lack of necessary knowledge and skills significantly impacted on the farmers and business owners prudently utilizing funds allocate to them. This leads to poor business performance leading to diminishing of capacity to repay the loans.

Gebeyehu, Beshire, and Haji (2013) in a study on the determinants of loan repayment performance in Ethiopia noted that group pressure on members to repay loans timely would increase the repayment rate. On the other hand, Nawai & Shariff (2012) in examination of factors affecting repayment performance in MFIs in Malaysia noted the importance of pressure in loan repayment. Their study noted that the peer pressure on defaulting members substantially reduces the moral hazards in group lending. Their study measured group pressure in terms of group willingness to pressurize members to pay the borrowed loans and the presence of internal code of conduct within the group that punishes defaulting members. The study emphasizes group liability as a determinant of repayment performance whether or not influencing on loan performance through utilizing the group members' ability to pressurize the members to make payments.

A loan term can refer to several things. In most cases, the term is either how long the loan will last if borrower make the required minimum payments each month or features of the loan that he or she agrees to. Based on the studies of Ndege (2017) & Ssekiziyivu (2017), loan terms are categorized into loan size, interest rate, payment period, frequency of payment, fine and penalties. Onyeagocha & Chidebelu (2012) carried a study on determinant of loan repayment performance in Southeast State of Nigeria. Mohamed (2003) argued that high interest rate caused delay in repayments of credit. Bumbie (2013) mentioned that groups with a weekly loan repayment performance of group loans had a better repayment performance

compared to those with a monthly repayment method. Moreover, the fines and penalties of defaulting have an effect on the loan repayment performance. As these findings, the study focuses loan terms whether or not affecting on repayment performance of group-based clients.

As demographic factors, these are factors that are used to define the characteristics of a person, a population or borrowers. Some commonly used demographic factors include variables such as gender, race, age, income, marital status, educational achievement, occupation, size of a family and the like. Most of the researchers studied the impact of demographic factors of borrowers on group loan repayment performance in various types of industries and fields. Addisu (2006) in a study on the Micro-finance problems in the Informal Sector in Addis Ababa noted that women were better loan payers than male members within the context of a group in terms of gender. According to Weber and Musshoff (2012), the age aspects is positively correlated with loan repayment performance due to improvement in capacity to pay. Mokhtar (2011) noted that married borrowers were seen to be more responsible in their loan repayment compared to their single counterparts.

Besides, Abreham (2002), Abafita (2003) and Million (2012) result that showed education was important and significant factor that enhances the loan repayment performance. They found that the educated client is able to use modern technologies, perform farming activities based on cropping calendar, and manage resources properly. Olagunju & Adeyemo (2007) showed that borrowers with lower number of household members would meet their repayment obligation better than those with high number of household members. Samuel, (2011) found out that income from activities financed by the loan is important and significant factor that enhances the credit repayment performance.

2.4 Conceptual Framework of the Study

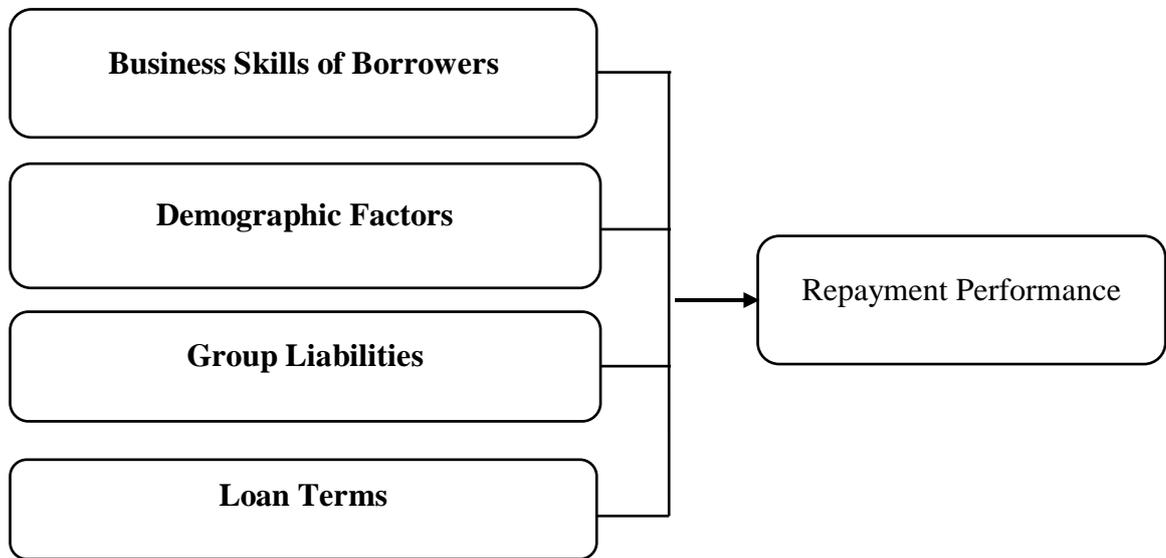
According to these findings, various factors have impact on repayment performance although their research areas are not the same with the study. According to their findings, repayment performance is important to make sure that the microfinance institutions are operated in a sustainable basis for continuing providing micro-credit to the lower income people. Thus, the study might, based on previous studies, expect that business skills of borrowers, demographic factors, group liabilities and loan terms are considered as important factors for repayment

performance of borrowers. This study hypothesizes factors affecting repayment performance, as shown in Figure 2.1 with conceptual framework.

Figure (2.2): Conceptual Framework of the Study

Independent Variables

Dependent Variables



Sources – Own Compilation based on Bumbie (2013), Bananuka, Nkote & Tumwebaze (2017), Ndege (2017) and Jote (2018)

Regarding to Figure (2.1), the independent variables are business skills of borrowers, demographic factors, group liabilities and loan terms. And these independent variables are measured with Five Point Likert Scale, using structured questionnaires. The dependent variable is repayment performance. Repayment performance is measured with Five Point Likert Scale, and structured questionnaires are used. Then, the arrows represent the relationship between these factors and repayment performance.

CHAPTER III

BACKGROUND STUDY ON PACT GLOBAL MICROFINANCE FUND IN MEIKTILA

This chapter mainly expresses microfinance services of Pact Global Microfinance in Meiktila. In addition, profile, organizational structure of Pact Global Microfinance in Meiktila are represented.

3.1 Background of Pact Global Microfinance Fund

In 1997, Pact began implementing UNDP's Microfinance Programme in the Central Dry Zone of Myanmar. Although Pact faced some early difficulties after making some critical improvements, it soon began to expand to the grassroots level. In 2006, UNDP awarded Pact the management of the entire program in the Dry Zone, Delta and Shan State. Meanwhile, Pact expanded its microfinance interventions in Myanmar independent of UNDP. By establishing a memorandum of understanding with the Ministry of Health, it was able to implement a health linked microfinance project financed by the Stromme Foundation in 2005.

Pact added new funding from various donors to build a smaller but equally successful version of its operations under UNDP. In November 2011, the government of Myanmar passed the Myanmar Microfinance Law, legalizing microfinance operations and providing for a licensing system for microfinance institutions. In early 2012, Pact established the Pact Global Microfinance Fund (PGMF), received a microfinance business license, and transferred all of its operations funded by non UNDP donors to PGMF. By this time Pact had commenced operations in 25 townships with direct donor funding. Over the years, PGMF has maintained its position as Myanmar's largest and most successful microfinance provider. Pact's microfinance operations have reached over 1,300,000 households since 1997. PGMF's clients are over 98% women and live in over 12,000 villages across 67 townships. according to PFMF Annual Report (2018).

Pact envisages a society in which poor and marginalized people exercise their rights, create their own strategies and take control of their future. As mission of PGMF, people with limited livelihood choices gain the resources needed to become income secure. PGMF will be home to programs, resources, technology, creativity, alliances, products and financial assets that achieve excellence in traditional sustainable microfinance. Besides, PGMF aims to increase family income and achieve better living conditions through a

sustainable credit service with a reasonable interest rate and terms. In addition, PGMF targets to fulfill capital requirements of economically poor households.

3.2 Profile of PGMF in Meiktila

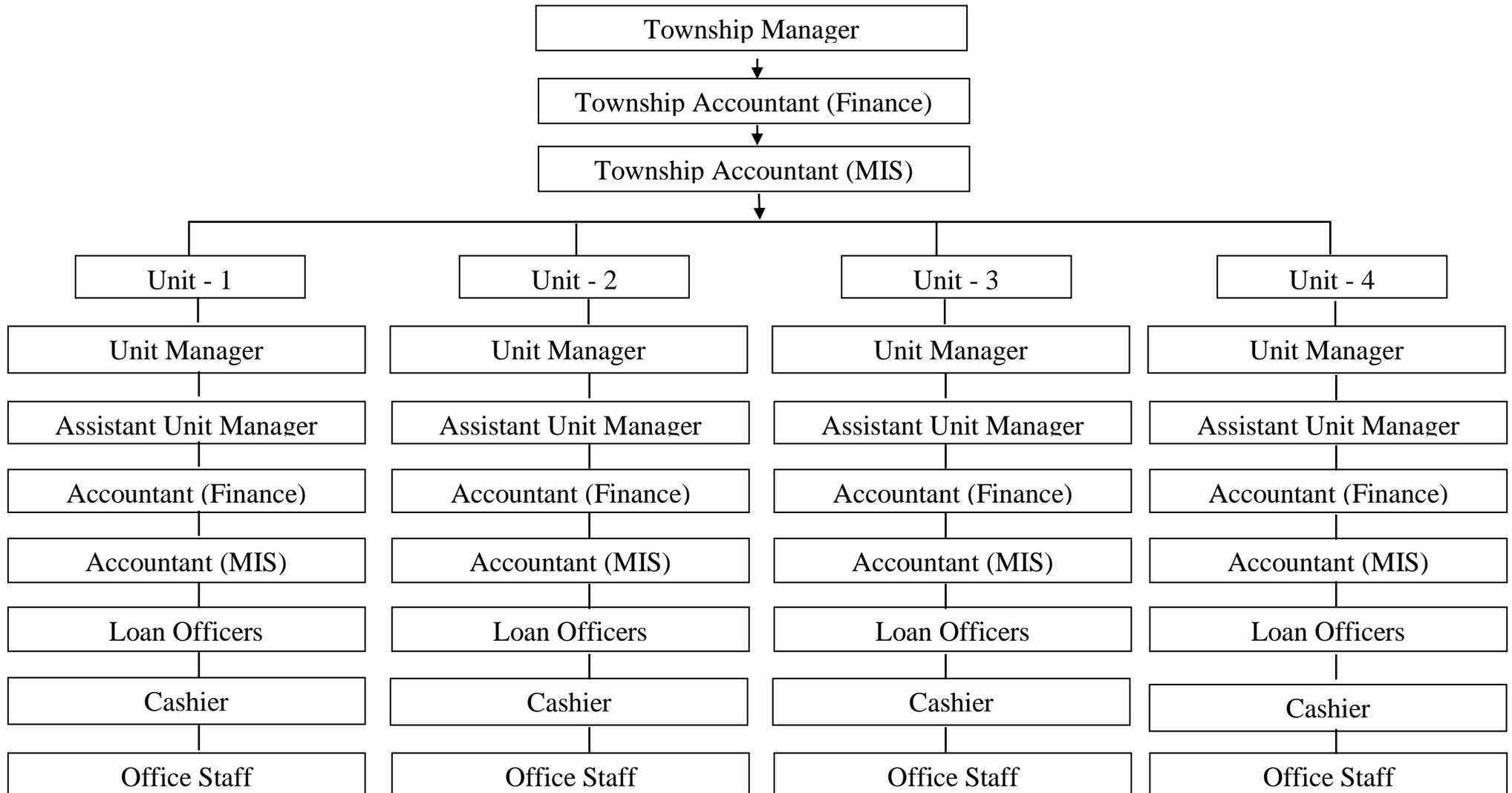
PGMF launched in Meiktila Township since June 2012. The operations started on 1st August 2012. Business operations are started with microfinance license number (0022/2012) in 2012. This license is permitted by Microfinance Supervisory Committee. The expansion projects area in Meiktila Township is four units and it is located at No.141, Shweli Street, Aungzayar Quarter in Meiktila. And the city is located between Wundwin, Myingyan, Yamethin and near Shan State on the east on the banks of Meiktila lake which is chief feature of a city Bagan-Taunggyi, Yangon-Mandalay and Meiktila-Myingyan highways in the Mandalay region. According to its junction points, Meiktila becomes a critical one for commercialization and economic development of the community.

3.3 Organization chart of PGMF in Meiktila

The organization is administered and headed by the township manager. Under the township manager, followed by township accountant (Finance), township accountant (MIS) and there are four divisional units in the organization. Each unit is formed with unit manager, assistant unit manager, accountant (finance), accountant (MIS), loan officers (Los), and cashier and office staff. Every unit is formed with equally. The organizational chart of PGMF in Meiktila is shown in Figure (3.1).

Organization structure is efficiently and effectively formed with supports of employees. According to the Figure (3.1), the organizational structure organizes the activities of the office around geographical, market and service. The Township Manager is responsible for the management of all Township divisional units. The city manager is responsible for implementing the policies approved by the city council and oversees the city's day-to-day operations. The Township Manager is responsible for preparing the annual budget, administering the personnel system and negotiating contracts. Besides, Table (3.1) shows the distributing of workforce by their respective department. There are totally sixty-nine (69) employees in PGMF (Meiktila).

Figure (3.1) Organizational chart of Pact Global Microfinance Fund in Meiktila



Source: PGMF (November, 2019)

Table (3.1) Workforce Distribution of of PGMF in Meiktila

Sr. No	Job Title	Position Title	No. of Staff
1.	Township Manager	Management	1
2.	Township Office Accountant (Finance)	Supporting	1
3.	Township Office Accountant (MIS)	Supporting	1
4.	Unit Manager	Management	4
5.	Assistant Unit Manager	Field	4
6.	Accountant (Finance)	Supporting	4
7.	Accountant (MIS)	Supporting	4
8.	Cashier	Supporting	4
9.	Loan officers	Field	42
10.	Office Staff	Supporting	4
Total			69

Source: PGMF (November, 2018)

Regarding to Table (3.1), there are 69 employees in PGMF comprising 5 employees of management, 18 employees of support and 46 employees of field. Similarly, it can be seen that there are three types of employee status: management, supporting and field. In Myanmar, PGMF categorize into four parts of unit: Unit 1, 2, 3 and 4. In particular, each unit runs by its own manager, which looks out for the best interests of the unit. Every unit works well in markets where there is a great deal of competition, where township manager can quickly shift the direction of their officer to respond to changes in local conditions. Number of villages and wards that is responsible for each unit is shown in Table (3.2).

Table (3.2) Number of Villages and Wards

Unit	No. of Villages	No. of Wards	Group Member Borrowers	Individual Borrowers
Unit – 1	68	3	1,023	17
Unit – 2	78	3	1,184	3
Unit – 3	45	6	1,072	28
Unit – 4	43	4	970	40
Total	234	16	4249	88

Source: PGMF (November, 2018)

In Table (3.2), this can be seen that there are four units and each unit has group borrowers and individual borrowers in respective villages and wards. In Unit-1, group formed are 1,023, individual borrowers are 17, village numbers are 68 and numbers of wards are 3. There are groups formed are 1,184, individual borrowers are 3,78 villages and 3 wards in Unit-2. In the Unit-3 and 4, there are the group-based borrowers are 1,072 and 970, the individual borrowers are 25 and 40, 45 and 43 villages and the wards are 6 and 4.

3.4 Services Provided by PGMF in Meiktila

PGMF offers a heavy of services. They aim to increase the financial inclusion of rural poor in Myanmar through the provision of financial services and non-financial services. The leading role of PGMF is to provide financial services to the clients. At former time, PGMF is the only access to affordable credit available. More than half of PGMF loans are for family farming, helping to increase yields and get products to market, resulting in higher household incomes. PGMF provides its clients with a selection of financial services to secure and improve their livelihoods. Financial services include saving plans and loans to team members in order to increase revenue of their business. PGMF is founded on the principle that credit alone is not enough for the poor to achieve income security.

Therefore, PGMF educates each of its clients in financial management and planning skills to facilitate their adoption of good financial practices with regard to their saving and income generating activities. PGMF provide financial literacy

training for new clients; gives loans for micro and small business, livestock, agricultures, equipment, and health emergencies; provides deposit services; provides cash transfer services for selected development projects.

PGMF offers business training before lending the loan. It provides clients to assist small and medium scale enterprise with identification and implementation of smart solution to their business planning, management and financial problems. PGMF serves social services including health disaster, vocational activities promote awareness. Moreover, they offer social support program to the team members. Social Support program is aimed to looking forward to support to the team members and their civilian families when they faced with the establishment of un-intention of the crisis such as family members died of accidentally, childbirth, natural disaster, loss of home and loss of capital. In addition, they also give its clients access to a quasi-insurance product designed to protect beneficiaries from external shocks like death, natural disaster, and children.

Reasonable interest rate, fair terms of financial services and long-term measures with incomplete financial capital has been to fulfil the needs of families and increasing family income to higher living standards. PGMF performs five processes from forming eight processes laid down by the government in order to carried out rural development and reduce poverty. They are;

1. Small private business development
2. Agricultural production development
3. Development of small-scale manufacturing operations
4. Social and economic development in rural areas
5. The development of livestock and fish production

In order to improve the above activities, PGMF carried out the process effectively in the saving, loan services decision and technical training for the poor households. Types of loan offered by PGMF are shown in Appendix B. There are two types of loan provided by PGMF to their clients. They are:

1. Income Generation Loans
2. Social Loans of Emergency Loans

In Income Generation loans including (1) business loan, (2) SME loan, (3) enterprise loan, (4) lease loan, (5) extra loan, and (6) agriculture loan. In social Loans include (1) education loan and (2) health loan. The clients of PGMF can enjoy up to 3 IG loans but total active loan amount may not exceed 10,000,000 Kyats. While social loans are not limited to the clients, it can take when face with really difficulty.

CHAPTER IV

ANALYSIS OF FACTORS AFFECTING REPAYMENT PERFORMANCE

In this chapter, the profile of the respondents and the main analysis of the factors affecting repayment performance are described. The detail steps of the analysis and the results are explained.

4.1 Research Design

The study emphasizes on quantitative research which seeks to investigate numerical numbers such as measurement of respondent perceptions measured with Likert Scale. The study is carried out with explanatory approach which attempts to clarify why and how there is a relationship between two variables or more aspects of a situation or phenomenon for factor affecting repayment performance.

The group-based clients of Pact Global Microfinance Fund in Meiktila Township are asked as respondents of the study. Primary data is collected by conducting personal interviews with the help of questionnaires. The target population is in the urban region of comprised a total of 4249 in group clients of four units of PGMF. The sample size for the study is determined by using the Cochran (1963)'s formula where the population size is 4249 group clients, margin of error is 0.05, and probability of previous similar studies is 0.50 are assumed at 95% confidence level. The study has been collected 352 questionnaires from group-based borrowers from four units of PGMF in Meiktila are selected with stratified sampling method to ensure that particular strata or categories of individuals are represented.

Table (4.1) Respondents by location

Name of Unit	Population	No. of Respondents	Percentage
Unit-1	1,023	85	24.08
Unit-2	1,184	98	27.87
Unit-3	1,072	89	25.23
Unit-4	970	80	22.82
Total	4249	352	100.00

Source: Survey Data (2019)

According to Table (4.1), the study distributes the structured questionnaires to group based borrowers of selected units in which they are used to borrow, and receives the 85 borrowers who are 24.08 percent of respondents who live in Unit-1, and 98, 89 and 80 borrowers are represented for Unit-2, Unit-3 and Unit-4 respectively in term of location.

4.2 Profile of the Respondents

This is based on the demographic factors which are divided into the seven factors. They are gender, marital status, age, educational level, monthly income level and number of family members. More details are explained as below.

4.2.1 Gender of Respondents

Gender of respondents is shown in Table (4.2).

Table (4.2) Gender of Respondents

Sr. No.	Gender	No. of Respondents	Percentage
1.	Male	38	10.80
2.	Female	314	89.20
Total		352	100.00

Source: Survey Data (2019)

According to Table (4.2), the sample is organized with 10.80 percent of male and 89.20 percent of female in term of position. This is seen that borrowers in terms of female are more than male.

4.2.2 Marital Status of Respondents

Marital Status of respondents is shown in Table (4.3).

Table (4.3) Marital Status of Respondents

Sr. No.	Marital Status	No. of Respondents	Percentage
1.	Single	18	5.10
2.	Marriage	329	93.50
3.	Others	5	1.40
Total		352	100.00

Source: Survey Data (2019)

Regarding to Table (4.3), 5.10 percent of the respondents are bachelors and maidens, and 93.50 percent of the respondents get married in term of marital status. In addition, some of respondents who are divorced and withdraw has 1.40 percent. This means that the respondents can be assumed more in marriage, rather than single.

4.2.3 Age of Respondents

Age of respondents is shown in Table (4.4).

Table (4.4) Age of Respondents

Sr. No.	Age	No. of Respondents	Percentage
1.	≤ 25 years	2	0.60
2.	26 - 30 years	133	37.80
3.	31 - 35 years	199	56.50
4.	36 - 40 years	18	5.10
5.	≥ 41 years	2	0.60
Total		352	100.00

Source: Survey Data (2019)

The age between under 25 and 25 years represented 0.60 percent and 26-30 years was 37.80 percent. 31-35 years and 36 - 40 years represented 56.50 percent and 5.10 percent respectively, and the rest percentages were above 40 years, as shown in Table (4.4). This is able to be assumed that most of the respondents' ages are between 31 years and 40 years.

4.2.4 Education Level of Respondents

Education Level of respondents is shown in Table (4.5).

Table (4.5) Education Level of Respondents

Sr. No.	Education Level	No. of Respondents	Percentage
1.	Basic level (primary, middle, high school)	201	57.10
2.	University level	7	2.00
3.	Bachelor	144	40.90
Total		352	100.00

Source: Survey Data (2019)

Regarding educational levels of Table (4.5), 201 respondents (57.10 percent) have attended only basic education schools and are the largest percentage of the respondents. 7 respondents (2 percent) has studied in university level but not completing. And, the rest percentage of education levels is for bachelor degree. Thus, it can be assumed that more than half of the respondents are basic educated persons.

4.2.5 Income Level of Respondents

Monthly Income Level of respondents is shown in Table (4.6).

Table (4.6) Monthly Income Level of Respondents

Sr. No.	Income	No. of Respondents	Percentage
1.	≤ 200,000 Kyats	5	1.40
2.	200,001 – 400,000 Kyats	5	1.40
3.	400,001 – 600,000 Kyats	271	77.00
4.	≥ 600,001 Kyats	71	20.20
Total		352	100.00

Source: Survey Data (2019)

As shown in Table (4.6), 77.00 percent of the respondents get monthly income between 400,001 Kyats and 600,000 Kyats and they gain largest income level, in comparing with other levels. 20.20 percent of the respondents get with 600,001 Kyats and above 600,001 Kyats. The rest percentage is 10 percent of the respondents have monthly income less than 400,001 Kyats as smallest.

4.2.6 Family Members of Respondents

Number of Family Members of Respondents is shown in Table (4.7).

Table (4.7) Number of Family Members of Respondents

Sr. No.	Family Members	No. of Respondents	Percentage
1.	Only one	29	8.23
2.	2-5	187	53.10
3.	6-9	88	25.00
4.	10-13	49	13.90
5.	Above 13	27	7.67
Total		352	100.00

Source: Survey Data (2019)

Regarding family members of Table (4.7), 29 respondents (8.23 percent) live alone. 187 respondents (53.10 percent) has the family members between 2 and 5, which is the largest percentage of the respondents. In addition, 88 respondents (25.00 percent) has the family members between 6 and 9. And the rest percentage has above 10 of family members. Thus, it can be assumed that the respondents are survival with family members between 2 and 5.

4.2.7 Occupation of Respondents

Occupation of Respondents is shown in Table (4.8).

Table (4.8) Occupation of Respondents

Sr. No.	Occupation	No. of Respondents	Percentage
1.	Employee	55	15.62
2.	Business owner	132	37.50
3.	Farmer	146	41.48
4.	Other	19	5.40
Total		352	100.00

Source: Survey Data (2019)

According to Table (4.8), 146 respondents (41.48 percent) are farmers who are the largest percentage of the respondents. 132 respondents (37.50 percent) are business owners who work as family business such as merchant or grocery shop. The rest respondents are employees and housewife as dependent spouse. Thus, it can be assumed that more than two third of the respondents are business owners and merchants.

4.3 Reliability Test for Variables

Before analyzing factors affecting repayment performance, reliability test is conducted initially. Reliability of any given measurement refers to the extent to which it is a consistent measure of a concept, and Cornbach's alpha is one way of measuring the strength of that consistency. Corbach's alpha is a measure used to assess the reliability of a set of test items. Zikmund & Bahin (2010) described that it is considered very good reliability when the Cornbach's alpha value is between 0.80 and 0.95, the alpha value between 0.70 and 0.80 shows as good reliability, it is tended to think of the alpha value between 0.60 and 0.70 as fair reliability, and the alpha value

below 0.60 is considered as poor reliability. Based on these assumptions, Cronbach's alpha value ought to be equal and more than 0.60 so that the higher the alpha value, the more reliability scale has.

Table (4.9) Reliabilities for Variables

Sr. No.	Variables	Cronbach's Alpha Value	No. of Items
1.	Business skills of borrowers	0.919	5
2.	Group liabilities	0.758	5
3.	Loan terms	0.536	5
4.	Demographic factors	0.913	6
5.	Repayment performance	0.864	5

Source: Survey Data (2019)

In Table (4.9), this illustrates that the coefficient alpha value of business skills of borrowers is 0.919 that is considered as very good reliability for this independent variable, and is maximum value among these five variables. And the results show that the coefficient alpha values of demographic factors and repayment performance have 0.913 and 0.864 respectively, and they can be assumed as being very good reliability. Group liabilities goes to good reliability with 0.758. But loan terms have weak alpha value with 0.536 for reliability. Thus, all variables can be assumed as reliable, according to Zikmund and Bahin (2010), except group liabilities.

4.4 Analysis on Factors Affecting Repayment Performance of Group Based Clients

The study test correlation analysis and multiple regression analysis to analyze the factors affecting repayment performance of group-based clients of PGMF in Meiktila.

4.4.1 Respondent Perception towards Factors

This section describes the means values of the factors of the independent variables that are business skills of borrowers, group liabilities, loan terms and demographic factors. According to Bowling (1997), the mean values of five-point Likert scale items are interpreted as follows:

The score among 1.00 – 1.80 means a sharp disagreement.

The score among 1.81 – 2.60 means disagree.

The score among 2.61 – 3.40 means neither agree nor disagree.

The score among 3.41 – 4.20 means agree.

The score among 4.21 – 5.00 means strongly agree.

In addition, standard deviations of each factor of the independent variables are described. Standard deviation (SD) is also the measure that is used to quantify the amount of variation or dispersion of a set of data value (Bowling, 1997). A low standard deviation indicates that the data tend to be close to the mean of the set, while a high standard deviation indicates that data points are spread out over a wide range of values.

4.4.2 Respondent Perception on Business Skills of Borrowers

The following Table (4.10) describes respondent perception on business skills of borrowers' factors with mean and standard deviation values. There are five factors for business skills of borrowers.

Table (4.10) Reliabilities for Variables

Sr. No.	Description	Mean	SD
1.	I record keeping documents in a business.	4.05	0.444
2.	I manage cash flow in a business.	4.18	0.504
3.	I have management skills in a business.	4.07	0.454
4.	I make monitoring and evaluation in a business.	4.06	0.430
5.	I take care customer service in a business.	4.04	0.438
Overall Mean		4.08	

Source: Survey Data (2019)

According to the results of Table (4.10), the overall mean values of factors related with business skills of borrowers shows that respondent perception reaches the agree level with 4.08. Cash flow management has maximum and agreeable mean values with 4.18 among business skills of borrowers' factors. A minimum mean value with 4.04 goes to emphasize on customer service. But all of these factors are seen with agree level. This seems that business skills are important for borrowers to repay their loan.

4.4.3 Respondent Perception on Group Liabilities

Respondent perception on group liabilities factors with mean and standard deviation values are described in the below Table (4.11). There are five factors for group liabilities.

Table (4.11) Respondent Perception on Group Liabilities

Sr. No.	Description	Mean	SD
1.	Group pressure is important to repay.	4.04	.263
2.	Group monitoring on individuals force to repay the loan.	4.01	.213
3.	There is someone who is family or relative in the group.	4.05	.257
4.	I don't want to destroy my reputation in the community as social ties.	4.00	.160
5.	Group teamwork is very critical for repayment.	3.99	.176
Overall Mean		4.02	

Source: Survey Data (2019)

Generally, the overall mean values of group liabilities factors show that respondent perception reaches the agree level with 4.02, as shown in Table (4.11). This indicates that group liabilities can support borrowers each other to repay on time. Having family members or relative in the group has the maximum mean value with 4.05 among five factors of group liabilities. For a minimum mean value, group teamwork is found with 3.99 of mean value among five factors of group liabilities.

4.4.4 Respondent Perception on Loan Terms

Respondent perception on loan terms is measured with five factors. The mean and standard deviation values are presented in Table (4.12).

Table (4.12) Respondent Perception on Loan Terms

Sr.No.	Description	Mean	SD
1.	The amount of loan is enough to run the business.	3.98	0.232
2.	I have intentions to borrow again based on given the interest rate of the loan.	4.01	0.238
3.	Loan repayment period has adequate time to run a business by using loan.	3.90	0.448
4.	I am comfortable with frequency of payment on loan such as daily, weekly, or monthly.	3.99	0.207
5.	Fines and penalties forces to repay when there is some default.	3.97	0.243
Overall Mean		3.97	

Source: Survey Data (2019)

Generally, the mean values of all loan terms factors show that respondent perception reaches the agree level with 3.97 according to Table (4.12). This seems that loan terms are important for borrowers to repay regularly. Interest rate have the maximum mean values with 4.01 at agreeable able among five factors of loan terms. Loan repayment period has the minimum mean value with 3.90 at agreeable level among five factors of loan terms.

4.4.5 Respondent Perception on Demographic Factors

Respondent perception on demographic factors is measured with six factors. The mean and standard deviation values are presented in Table (4.13).

Table (4.13) Respondent Perception on Demographic Factors

Sr. No.	Description	Mean	SD
1.	I repay my loan on time because of gender.	3.25	0.728
2.	Loan repayment depends on youngest, maturity or elder.	3.62	0.807
3.	My loan is fully repaid on time because of marital status.	3.48	0.870
4.	Income level can support my loan repayment.	3.59	0.836
5.	I repay my loan on time because of my education level.	3.50	0.795
6.	Depending on number of family size, my loan repayment can be changed.	3.69	0.691
Overall Mean		3.60	

Source: Survey Data (2019)

Generally, the overall mean values of demographic factors show that respondent perception reaches the agree level with 3.60, as shown in Table (4.13). This indicates that demographic factors partially can support borrowers to develop good repayment. Number of family size has the maximum mean value with 3.69 among five demographic factors. For a minimum mean value, depending on gender are found with 3.25 of mean value among five demographic factors.

4.4.6 Summary of Respondent Perception

Mean and standard deviation values of above four mentioned factors are summarily shown in Table (4.14).

Table (4.14) Respondent Perception on all Factors

Sr. No.	Description	Mean
1.	Business skills of borrowers	4.08
2.	Group liabilities	4.02
3.	Loan terms	3.97
4.	Demographic factors	3.60

Source: Survey Data (2019)

According to the results of Table (4.14), business skills of borrowers has the maximum mean value among these variables. Next group liabilities and loan terms found with mean values at agreeable level: 4.02 and 3.97 respectively. Last, demographic factors have the minimum mean value with comparing to other variables. These results show that these factors are able to assume as significant factors to support repayment performance of borrowers.

4.4.6 Respondent Perception on Repayment Performance

Respondent perception on repayment performance related with their loans is measured with five factors. The mean and standard deviation values are presented in Table (4.15).

Table (4.15) Respondent Perception on Repayment Performance

Sr. No.	Description	Mean	SD
1.	I repay my loan on time without any inducement.	4.00	.151
2.	I fully repay my loan on due date.	3.98	.150
3.	I did not delay to repay my loan.	3.96	.131
4.	I repay my loan consistently.	4.00	.141
5.	I am comfortable to repay my loan weekly.	3.99	.119
Overall Mean		3.99	

Source: Survey Data (2019)

Generally, the mean values of all repayment performance factors show that respondent perception reaches the agree level with 3.99 according to Table (4.15). In addition, these five factors seem nearly scale of agree able with 4.00. Thus, these five factors of repayment performance have the agreeable levels with the preferred

standard deviation values that are below one. Thus, these results mention that the repayment performance of selected borrowers in PGMF is related with their business skills, group liabilities, loan terms and demographic factors.

4.5 Correlation Analysis of Factors Affecting Repayment Performance

After the reliability test, the correlations of the independent variables (business skills of borrowers, group liabilities, loan terms and demographic factors) are tested to show their correlation with dependent variable (repayment performance). Correlation is the statistical technique that can show whether and how strongly pairs of variables are related. Correlation coefficient ranges from -1.0 to +1.0. The results of the correlations of the measured variables are shown in (Table 4.16).

Table (4.16) Correlation analysis between Independent and Dependent variables

Sr. No.	Independent Variables	Correlation Coefficient ^a	P-Value
1.	Business skills of borrowers	0.181**	0.000
2.	Group liabilities	0.571**	0.000
3.	Loan terms	0.589**	0.000
4.	Demographic factors	0.007	0.892
a = Dependent variable (repayment performance)			
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Survey Data (2019)

Regarding to the results shown in Table (4.16), group liabilities and loan terms have moderate positive correlation with repayment performance (0.571 and 0.589) at the 0.01 level (2-tailed). Although the business skills of borrowers have relationship with repayment performance (0.181) at the 0.01 level (2-tailed), their magnitude of correlation is poor. Unfortunately, demographic factors are not correlated with repayment performance because its P value is greater than 0.01 level (2-tailed). But, the value of these positive correlation is between 0 and + 1.0, thus these above results

show that except demographic factors, these factors managed by borrowers, the higher their repayment performance has.

4.6 Multiple Regression Analysis for Repayment Performance

Multiple regression analysis is a statistical tool used to derive the value of a criterion from several other independent, or predictor, variables. Multiple regression analysis is conducted to test the proposed objectives of the relationship between independent variables (business skills of borrowers, group liabilities, loan terms and demographic factors) and dependent variable (repayment performance). The results are shown in Table (4.17).

Table (4.17) Multiple regression analysis for Repayment Performance

Coefficient ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.504	0.137		10.965	0.000
Business skills of borrowers	0.039**	0.007	0.228	5.447	0.000
Group liabilities	0.337**	0.032	0.469	10.674	0.000
Loan terms	0.227**	0.029	0.346	7.892	0.000
Demographic factors	0.023	0.011	0.081	2.091	0.037
a = Dependent variable (repayment performance),					
P < 0.01					

Source: Survey Data (2019)

Thus, the study estimates the following model:

$$\hat{Y} = y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4$$

Where: $\hat{Y} = y$ = Repayment performance

a = Constant (intersection)

b = Coefficient (the slope of the regression)

x_1 = Business skills of borrowers

x_2 = Group liabilities

- x_3 = Loan terms
 x_4 = Demographic factors

At $P < 0.01$,

$$\text{Repayment performance} = 1.504 + 0.039 \text{ Business skills of borrowers} \\ + 0.337 \text{ Group liabilities} + 0.227 \text{ Loan terms}$$

The results of multiple regression analysis provided that business skills of borrowers, group liabilities and loan terms have significant and positive impact on repayment performance of borrowers ($b=0.039$, $t=5.447$, $p<0.01$; $b=0.337$, $t=10.674$, $p<0.01$; and $b=0.227$, $t=7.892$, $p<0.01$ respectively) at 0.01 significant level. These results mention that if borrowers could not repay their loan, their repayment performance is 1.504. This shows that the borrowers can get negative effects their performance if it is not able to apply any of these variables, even if there are other effective skills owned by borrowers and group members. One additional unit of business skills of borrowers increases 0.039 times in their repayment performance. One additional unit of group liabilities increases 0.337 times in repayment performance. One additional unit of loan terms increases 0.227 times in repayment performance. Among these three variables, group liabilities have supported repayment performance than other two variables. But it is found that demographic factors do not impact on repayment performance ($b=0.023$, $t=2.091$, $p>0.01$) at 0.01 significant level. If confident level is assumed as 95 percent, demographic factors of borrowers will positively affect on repayment performance ($b=0.023$, $t=2.091$, $p<0.05$) at 0.05 significant level. Thus, according to these statistical results, business skills of borrowers, group liabilities and loan terms are essential factors to improve repayment performance of group-based borrowers at 0.01 significant level.

CHAPTER V

CONCLUSION

In this chapter, findings and discussions, suggestions and recommendations, and limitation and further needs for studies are explained in details related with the objectives of the study.

5.1 Findings

The objectives of the study are to explore the microcredit services of Pact Global Microfinance Fund in Meiktila Township and to analyze the factors affecting repayment performance of group borrowers of Pact Global Microfinance Fund in Meiktila Township. For first objective of the study, this is firstly seen that there are various types of findings related with microfinance services of Pact Global Microfinance Fund in Meiktila. Income generation loans and social loans are mainly offered in PGMF. In details, income generation loan is divided into six types: namely business loan, SME loan, enterprise loan, lease loan, extra loan, and agriculture loan. Similarly, social loans comprise with education loan and health loan. Regarding to the types of loan, it is found that most of group-based borrowers are taking business loans and enterprise loans.

Besides, most of the borrowers take the loan with different types of purpose. Among these purposes, majority of borrowers use loan to run their business and grocery shops. This is why their business and shops need financial help for survival and investment. And some of them aims to support their children education by using education loans of PGMF. Moreover, majority of borrowers answered that they could repay loan on time in descriptive analysis. This seems that if they do not have intentions to repay loan, they will not again borrow from PGMF.

With the perceptions, independent variables (business skills of borrowers, group liabilities, loan terms and demographic factors) are used in the study to analyze repayment performance for group-based borrowers. Mean values of all independents variables seems agree able. Among these variables, borrowers agree that management skills, cash flow management and other business skills are important for repayment performance and has largest mean value. This is why the borrower repay the loan with the return that is derived from the business operations. As these conditions, business

skills seem to reflect on repayment performance. For group liabilities, borrowers agree that microcredit purports to improve repayment rates through peer screening, monitoring, and enforcement. This is why it may create excessive pressure, and discourage reliable clients from borrowing. In addition, borrowers give the agree level with loan terms of PGMF. This is why interest rate are affordable for borrowers and PGMF arranges adequate time for repayment. They can circulate their money with appropriate time to repay their loan. In terms of demographic factors, this is minimum mean value among four variables. This is why demographic factors has partially impact on repayment performance.

Regarding to the results of correlation analysis, three independent variables (business skills of borrowers, group liabilities and loan terms) are significantly and positively correlated with dependent variable (repayment performance). But demographic factors are not correlated with repayment performance. Firstly, this is seen that there is a weak positive relationship between business skills of borrowers and repayment performance. This means that the more the loan officer gives training or sharing know to improve business skills, the more they gain good repayment performance. Alternatively, the more borrowers manage their business, the more they can repay the loan in time. For group liabilities, there is a positive moderate relationship with repayment performance. The more group monitor and give pressure, the more they can repay the loan in time. This is why group members force each other to repay and has afraid if they have relative or members in the group.

As next variable, there is a positive moderate relationship between loan terms and repayment performance and this relationship has the maximum magnitude compared to business skills, group liabilities and demographic factors. Most of borrowers find the lowest interest charges for their loan, and they more prefer long period for frequency because they can find the amount needed. These conditions loan terms are related with repayment performance. If the borrowers gain suitable loan terms, the more they can repay the loan in time. However, demographic factors are not related with repayment performance according to results of correlation analysis. Some factor such as gender are not significant for repayment because male or female does not matter. If the study uses chi-square test to analyze the relationship between demographic factors and repayment performance, the results can be changed. Here demographic factors are analyzed with Likert scale, and these factors.

Multiple regression analysis is used as the main analysis to analyze the aims for factors affecting on repayment performance. The results show that business skills of borrowers, group liabilities and loan terms positively and negatively impact on repayment performance. However, this is indicated that demographic factors do not effect on repayment performance.

Relating with business skills of borrowers, there is a positive impact on repayment performance in the study. Angaine & Waari (2014) also mentions that business skills have a critical influence on the repayment of the group loans. The study is similar with previous research. Moreover, there is a positive impact on repayment performance by group liabilities in the study. Gebeyehu, Beshire, and Haji (2013) in a study on the determinants of loan repayment performance in Ethiopia noted that group pressure on members to repay loans timely would increase the repayment rate. The study seems similar to their research. This shows that borrowers obtain loan in terms of group, repayment for their loan is increased. If borrower obtained loan as group lending scheme, he or she will obtain the support and guidance from the others and incentive to operate effectively as loan was taken in terms of group.

Concerning with loan terms, Ndege (2017) explored that loan repayment is positively correlated on repayment performance of group-based clients. The findings of Ndege is similar with the study. The repayment period given by PGMF is longer, the borrowers can perform better and can run the business without shortage of working capital. In addition, appropriate level of interest rate forces to the worries of borrowers and can repay on time. This forces more time to develop more revenue and profit for their survival. Besides, demographic factors were not significant determinants of loan repayment performance of group-based borrower of PGMF. But Ndege (2017) and Jote (2018) argued that loan repayment is correlated on repayment performance of group-based clients. His findings are different with those of the study.

5.2 Suggestions

Based on the outcome of these findings, the study recommends that PGMF should give training or share knowledge borrowers how to operate or start a business for their success. If the group borrowers lack the necessary knowledge and skills for prudently utilizing funds, this leads to poor business performance leading to diminishing of capacity to repay the loans. The PGMF should monitor and check the

conditions of businesses or households. And PGMF should suggest how to improve management skills to borrowers. And PGMF should ask some questions and advices related with business skills and about their business.

Concerning to group liabilities, PGMF should implement strong internal rules and regulations for good loan repayment performance by the group members. In addition, the borrowers should develop a strong relationship and trust within group. And PGMF should encourage peer monitor, set up code of conduct among group members and discourage relative from forming group.

Regarding to loan terms, PGMF should review credit score and credit history of borrowers to give a sense of how borrowers manage money and the likelihood that they'll be able to pay back their loan. In addition, the higher the loan size given by the institution, the lower can be the repayment rate of the borrowers. Loan sizes also in most cases affect the nature of business and type of investment for the borrowers. Microfinance institutions often advance the size of small loans as a way to minimize risks. These conditions force that PGMF should diverse their loan amount into small pieces that can effort borrowers to repay their loan, depending on their proposal. And the level of interest rate has a direct effect on ability of borrowers to repay. PGMF should encourage loan policy which favors minimization of interest rates to increase the base of loan beneficiaries. In terms of demographic factors, these factors depend on the borrowers. Overall, PGMF should develop motivation programs to borrowers who can be becoming to repay on time and become willing to communicate with the institutions. PGMF should emphasizes these factors to improve repayment performance of group-based borrowers.

5.3 Needs for Further Study

The study only focuses on factors that are business skills of borrowers, group liabilities, loan term and demographic factors. The findings of the study confirm that these factors significantly and positively impact on repayment performance, except demographic factors. This is why the respondents answer the questionnaires related with these factors of group-based borrowers of PGMF in Meiktila. And among these factors, group is the most significant and positive impact on repayment performance. These factors are measured with five-point Likert scale and analyzed with correlation and regression analysis. If the relationship between demographic factors and repayment performance are analyzed with chi-square test, the results can be changed.

Other limitations of this study should be considered when future research interprets the findings. Data was collected only from the group-based borrowers of PGMF in Meiktila which may limit the generalizability of the findings until the results are replicated and extended in the other Microfinance Institutions. The study only emphasizes on group-based borrowers and the results can be changed if asking to individual based borrowers. The study exploits one-time survey is able to address the determinant factors of beneficiaries of loan repayment problem in PGMF in Meiktila. Additional survey becomes crucial to make sure this finding is consistent. Further study needs to incorporate beneficiaries from different MFIs found in different zones, regions and countries.

REFERENCES

1. Abafita, J. (2003) *Microfinance and Loan Repayment Performance: A Case Study of The Oromia Credit and Savings Share Company (Ocssco) In Kuyu*, M.Sc Thesis, Addis Ababa University, Addis Ababa.
2. Abreham (2002) “*Loan repayment and its Determinants in Small-Scale Enterprises Financing in Ethiopia: Case of private borrowers Around Zeway Area*”, AAU
3. Afolabi, J. A. (2010). Analysis of loan repayment among small scale farmers in Oyo State. *Social Sciences Journal*, pp. 115-119.
4. Berhanu A., Fufa B. (2008). *Repayment rate of loans from semi-formal financial institutions among small-scale farmers in Ethiopia. Two-limit Tobit analysis*. *J.soc. Econ.* 37:2221-2230.
5. Bowling, A. (1997). *Research Methods in Health*. Buckingham. Open University Press.
6. Cochran, W.G. (1963) *Sampling Techniques*, Wiley, New York.
7. Fao (2014). *Sources of microfinance for forest-based enterprises*. Retrieved from <http://www.fao.org/3/a0226e/a0226e07.htm>
8. Jote, G. G (2018), Determinants of Loan Repayment: The Case of Microfinance Institutions in Gedeo Zone, SNNPRS, Ethiopia, *Journal of Accounting and Finance*. 6(3): 108-122.
9. Kohansal, M.R. and Mansoori, H. (2009). *Factors Affecting on Loan Repayment Performance of Farmers in Khorasan*. Razavi, s.n.
10. MEBA (2018). “*History of Microfinance*”. Retrieved June 04, 2019 from <http://unepmeba.org/en/definiciones/historia-de-las-microfinanzas/>
11. Million, S., Nyikal, R., & Wania, S. (2012). *Factors affecting loan repayment performance. Developing Countries Studies*. pp. 4-10.
12. MMI (2016). “*Microfinance and Microcredit*”. Retrieved May 14, 2019 from <https://microfinanceinfo.com/>
13. Mohamed, K. (2003). Research on poverty alleviation: Access to formal and quasi-formal credit by smallholder farmers and artisanal fishermen. *Journal of International Development*, Volume 20, pp. 598-612.

14. Natukunda, J. (2010). Microcredit lending terms: How to reduce arrears in microfinance institutions. *Journal of Microfinance*, Volume 3, pp. 614-628.
15. Olagunju, F. I., & Adeyemo, R. (2007). Determinants of repayment decision among small holder farmers in Southwestern Nigeria. *Medwell Journals*. pp. 677-686.
16. Onyeagocha, S., & Chidebelu, D. (2012). Determinants of loan repayment of microfinance. *International Journal of Science and Humanities*, 1(1), pp. 3-6.
17. Pact (2019). "Development of microfinance in Myanmar" Retrieved May 14, 2019 from <https://www.pactworld.org/country/myanmar>
18. Samuel, S. A. (2011). Credit default risk and its determinants of microfinance industry in Ethiopia. *Journal of Microfinance*, Volume 6, pp. 1042-1047.
19. Sylvester, I., Okpara, C., & Chukwudi, J. (2013). Determinants of loan repayment performance. *Advances in Economics and Business Journal*, 2 (1), 14-21.
20. Tnsue, G. (2011). Determinants of loan repayment in microfinance institutions. *Journal of Development Economics*, 46, 1-18.

APPENDICES

APPENDIX (A)

I'm a master second year student from Yangon University of Economics, currently pursuing a degree of Master of Banking and Finance (MBF). As part of my graduation, I am required to conduct this survey. The title of thesis is **“Factors affecting repayment performance of group-based borrowers”**. It would probably take about 10 - 15 minutes to answer this questionnaire.

Section A – Demographic Profile

1. Gender:

- Male
 Female

2. Marital Status

- Single
 Married
 Others (Please specify) -----

3. Your age:

- under 25 and 25 years
 26 - 30 years
 31 - 35 years
 36 - 40 years
 41 years and more

4. Educational level:

- Basic level (primary, middle, high school)
 University level
 Bachelor
 Master
 Others (Please specify) -----

5. Monthly income

- ≤ 200,000 Kyats
- 200,001 – 400,000 Kyats
- 400,001 – 600,000 Kyats
- ≥ 600,001 Kyats

6. Number of family members

- 1 - 4
- 5 - 8
- 9 - 12
- above 12

Section B: Factors affecting on repayment performance

7. How many members in your group?

8. How much you borrow regularly?

- ≤500,000 Kyats
- 500,001 – 1,000,000 Kyats
- 1,000,001 – 1,500,000 Kyats
- ≥1,500,001 Kyats

9. Could you repay the loan on time?

Yes No

10. If you please, which purpose is your loan is used for? -----

Please indicate level of agreement with each of the following statements by **CIRCLING (O)** the number that you think is most appropriate to stating your opinion. Please choose from the answers given (1 = Strongly disagree, 2 = Disagree, 3 = Neither disagree nor agree, 4 = Agree, 5 = Strongly agree).

Business Skills of Borrowers		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	I record keeping documents in a business.	1	2	3	4	5
2.	I manage cash flow in a business.	1	2	3	4	5
3.	I have management skills in a business.	1	2	3	4	5
4.	I make monitoring and evaluation in a business.	1	2	3	4	5
5.	I take care customer service in a business.	1	2	3	4	5
Demographic Factors						
1.	I repay my loan on time because of gender.	1	2	3	4	5
2.	Loan repayment depends on youngest, maturity or elder.	1	2	3	4	5
3.	My loan is fully repaid on time because of marital status.	1	2	3	4	5
4.	Income level can support my loan repayment.	1	2	3	4	5
5.	I repay my loan on time because of my education level.	1	2	3	4	5
6.	Depending on number of family size, my loan repayment can be changed.	1	2	3	4	5
Group Liabilities						
1.	Group pressure is important to repay.	1	2	3	4	5
2.	Group monitoring on individuals force to repay the loan.	1	2	3	4	5

3.	There is someone who is family or relative in the group.	1	2	3	4	5
4.	I don't want to destroy my reputation in the community as social ties.	1	2	3	4	5
5.	Group teamwork is very critical for repayment.	1	2	3	4	5
Loan Terms						
1.	The amount of loan is enough to run the business.	1	2	3	4	5
2.	I have intentions to borrow again based on given the interest rate of the loan.	1	2	3	4	5
3.	Loan repayment period has adequate time to run a business by using loan.	1	2	3	4	5
4.	I am comfortable with frequency of payment on loan such as daily, weekly, or monthly.	1	2	3	4	5
5.	Fines and penalties forces to repay when there is some default.	1	2	3	4	5
Repayment Performance						
1.	I repay my loan on time without any inducement.	1	2	3	4	5
2.	I fully repay my loan on due date.	1	2	3	4	5
3.	I did not delay to repay my loan.	1	2	3	4	5
4.	I repay my loan consistently.	1	2	3	4	5
5.	I am comfortable to repay my loan weekly.	1	2	3	4	5

(Thank you for your invaluable time and efforts.)