

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF COMMERCE
EXECUTIVE MASTER OF BANKING AND FINANCE
PROGRAMME**

**DETERMINANTS OF OVER-INDEBTEDNESS FOR
MICROFINANCE CLIENTS**

**NYEIN ZARNI WAI
(EMBF 5TH BATCH)**

DECEMBER, 2019

DETERMINANTS OF OVER-INDEBTEDNESS FOR MICROFINANCE CLIENTS

A thesis submitted as a partial fulfillment towards the requirements for
the degree of Executive Master of Banking and Finance (EMBF)

Supervised by

Daw Khin Nwe Ohn
Associate Professor
Department of Commerce
Yangon University of Economics

Submitted by

Nyein Zarni Wai
Roll No. 43
EMBF 5th Batch
Yangon University of Economics

ABSTRACT

This study aims to analyze the determinants of over-indebtedness for microfinance clients based on primary and secondary data. The sample size of 133 respondents of total 1,300 microfinance clients who have been borrowing from at least two microfinance institutions was selected with random sampling and conducted face to face interviews with structured questionnaires. Descriptive and multiple regression method are used for analysis of this study. To determine the determinants of over-indebtedness, the three dimensions are divided in this study, (1) Credit Taking Behaviors, (2) Multiple Borrowing and (3) Lack of Financial Literacy. The analysis in the study revealed that credit taking behaviors and lack of financial literacy are significantly related with over-indebtedness of microfinance clients. The finding suggests that getting loans easily from microfinance institutions and poor money management skill of clients make them impulsive and it causes them over-indebted. To reduce over-indebtedness, microfinance institutions should improve their marketing strategies and lending procedures from client protection while maintaining risk management standards. Microfinance institutions should also provide efficient training for clients to improve their money management skills before providing loans.

ACKNOWLEDGEMENTS

This thesis could not have been successfully completed without the helps and assistance from the following personnel. Firstly, I would like to express my deepest gratitude to Prof. Dr. Tin Win, Rector, Yangon University of Economics and Prof. Dr. Nilar Myint Htoo, Pro-Rector, Yangon University of Economics for permitting me to attend this valuable EMBF Programme.

I also would like to extend my sincere thanks to Prof. Dr. Soe Thu, Programme Director of the Executive Master of Banking and Finance, Head of Department of Commerce, Yangon University of Economics for her passionate monitoring, suggestions and guidance in carrying out this paper.

And I wish to extend deepest thank to my supervisor Daw Khin Nwe Ohn, Associate Professor, Department of Commerce, who supervised and gave me invaluable advise, helpful encouragement, close guidance throughout my thesis. My sincerest thanks go to all lecturers, associate professors, professors of Department of Commerce and all visiting lectures and professor who actively contributed their valuable knowledge and wisdom to us.

Furthermore, I am really grateful to the microfinance clients in the Dawpon Township during survey data collection and dealing with them for interview.

Finally, I would like to express my heartfelt gratitude to my beloved family and friends from EMBF 5th Batch for their understanding, support, strength and help through the duration of my studies.

CONTENTS

		Page
ABSTRACT		i
ACKNOWLEDGEMENTS		ii
TABLE OF CONTENTS		iii
LIST OF TABLES		v
LIST OF FIGURES		vi
LIST OF ABBREVIATIONS		vii
CHAPTER 1	INTRODUCTION	1
1.1	Rationale of the Study	2
1.2	Objective of the Study	3
1.3	Scope and Method of the Study	3
1.4	Organization of the Study	4
CHAPTER 2	THEORETICAL BACKGROUND	5
2.1	Key Concepts and Principles of Microfinance	5
2.2	Role of Microfinance in Poverty Alleviation and Financial Inclusion	6
2.3	Over-indebtedness of Microfinance Clients	8
2.4	Conceptual Framework of Previous Study	10
2.5	Conceptual Framework of the Study	12
CHAPTER 3	MICROFINANCE IN MYANMAR	14
3.1	Overview of Microfinance Sector in Myanmar	14
3.2	Regulation and Supervision of Microfinance Industry	15
3.3	Financial Inclusion in Myanmar	17
3.4	Over-indebtedness in Urban Areas of Myanmar	17
CHAPTER 4	ANALYSIS ON DETERMINANTS OF OVER-INDEBTEDNESS	20
4.1	Research Design	20

4.2	Demographic Profile of the Respondents	20
4.3	Determinants of Over-indebtedness	26
4.4	Correlation Coefficient between Determinants and Over-indebtedness	31
4.5	Analysis on Determinants of Over-indebtedness for Microfinance Clients	32
CHAPTER 5	CONCLUSION	34
5.1	Findings	34
5.2	Recommendations	35
5.3	Needs for Further Study	36

REFERENCES

APPENDIX

LIST OF TABLES

Table No.	Description	Page
3.1	Number of Microfinance Institutions, Myanmar	15
3.2	Legislative/Regulatory Requirement for Microfinance Institutions	16
4.1	Number of Respondents by Gender	21
4.2	Number of Respondents by Age Group	21
4.3	Number of Respondents by Marital Status	22
4.4	Number of Respondents by Basis Education Level	22
4.5	Number of Respondents by Family Size	23
4.6	Number of Dependents in Household	23
4.7	Number of Respondents by Employment Status	24
4.8	Number of Respondents by Type of Business	24
4.9	Number of Respondents by Monthly Income	24
4.10	Number of Respondents by Monthly Expenditure	25
4.11	Credit taking behaviors	26
4.12	Multiple Borrowing	27
4.13	Lack of Financial Literacy	28
4.14	Over-indebtedness	29
4.15	Correlation Coefficient between Determinants and over-indebtedness	29
4.16	Multiple Regression Analysis on influencing factors over over-indebtedness	30

LIST OF FIGURES

Figure No.	Description	Page
2.1	Conceptual Framework of Previous Study	12
2.2	Conceptual Framework of the Study	13
3.1	Lending Pressure related to number of MFIs	19

LIST OF ABBREVIATIONS

MFI	-	Microfinance Institution
CGAP	-	Consultative Group to Assist the Poor
MMFA	-	Myanmar Microfinance Association
MMSE	-	Myanmar Microfinance Supervisory Enterprise
MBL	-	Microfinance Business Law
MBSC	-	Microfinance Business Supervisory Committee
NGO	-	Non-Profit Organization
FRD	-	Financial Regulatory Department
NPL	-	Non-Performing Loan

CHAPTER I

INTRODUCTION

Microfinance industry around the world has grown rapidly over the last decade, directly reaching millions of poor people, providing credit and other forms of financial services. Micro lending based on solidarity groups consisting mainly of women members has become to occupy the core of microfinance practice. Group lending method provides the ability to solve information asymmetry problems between lender and borrower without the help of collateral.

If it is used prudently, it can serve as an effective instrument in promoting financial inclusion of developing countries. The opposing side is the many of studies that has also shown that advancing loans to the poor could cause more harm than good, as the accumulated debt that must be repaid would lead this already-poor people into further impoverishment, creating a possible cycle of debt and over-indebtedness resulted in financial exclusion.

The microfinance industry which provides financial services to poor populations in developing countries has faced the risk of over-indebtedness. With increasing concerns about negative effects of microfinance on borrowers, at a time where trust in the positive impact of microfinance is weakening, over-indebtedness is one of the most pressing challenges facing the microfinance industry. It endangers at the same time the sustainability of microfinance institutions (MFIs) and their social impact. Myanmar which is one of the developing countries, cannot escape from this global phenomenon.

Over-indebtedness is a problem for people who live in a condition of economic distress which they are unable to quit. It can seriously damage clients. They struggle to make repayments, cutting back on basic consumption as well as other important household expenditures, such as education or healthcare. Then, of course, over-indebtedness has material costs, such as late fees and, in default cases, asset seizures. Over-indebtedness can have sociological implications, including peer pressure in groups, loss of one's dignity and social position, and violence in the household. Finally, over-indebtedness can have other long-lasting mental and physical health effects, including suicide in extreme cases.

If there is micro lending, some borrowers will inevitably wind up with repayment problems. Thus, there is some degree of trade-off: we cannot maximize borrowers' access and minimize debt stress at the same time. For instance, the most obvious way to lower over-indebtedness is to tighten lending standards. This will prevent loans to some people who would wind up having serious repayment problems. But it will also prevent loans to some other people who could have repaid without difficulty even though they fell short of the new loan requirements.

Many factors come up with over-indebtedness: lender behaviors can put borrowers at excessive risk, clients themselves can make bad borrowing decisions, and external factors beyond both parties' control like raising commodity price and adverse shocks such as natural disasters can push borrowers into situations where they cannot repay. (Jessica Schicks and Richard Rosenberg, 2011)

1.1 Rationale of the Study

For a long time, the main concern of microfinance was expanding access-delivering formal financial services, mainly credit, to as many people as possible. Few people were thinking about over-indebtedness. At late as April 2008, Deutsche Bank, The Boulder Institute, and CGAP convened a group of microfinance practitioners and experts to reflect together about the state of the microfinance industry, its risks, and its future. As an early exercise, participants each listed a few things that worried them most about the industry. Over-indebtedness was mentioned only by few and credit risk was rated as less serious danger threat to the industry in Microfinance Banana Skins 2008. After the repayment crises happened in Bosnia-Herzegovina, Morocco, Nicaragua, Pakistan, and India at 2011, concern on microcredit over-indebtedness was growing body of research. In 2011, credit risk had climbed to the top of the list of microfinance threats. "Microfinance Banana Skins – 2012 and 2014" had rated the situation of borrower's over indebtedness as the most serious risk factor among all other risk factors confronting the industry (CSFI, 2014).

Since the formation of microfinance revolution, it has been the need to bring formal financial services mainly loans to the hundreds of millions of poor people who had no access to those. Nowadays, there are many more markets where the goal is being reached, standard loan products are available and almost all of people are

served. In the other words, many more microcredit markets are starting to reach saturation.

Microfinance Law in 2011 led to a rapid flood of Microfinance Institutions (MFIs) in Myanmar. MFIs are targeting the same areas, mainly Yangon, Mandalay, Bago and Ayeyarwaddy with fewer of them focusing on rural areas where microfinancing is needed the most. The increase in the number of MFI operators to 181 MFIs, all with a focus on portfolio growth, has resulted in competition with high market penetration. (FRD, 2019).

Over-indebtedness of borrowers is currently not monitored in Myanmar, potentially leading to tragic consequences. Currently clients can borrow from multiple MFIs, having unsustainable amounts of debt. There is little information sharing between neither MFIs, nor a credit bureau where MFIs could see whether a client has outstanding loans. (Walker, 2016) Having a credit bureau could help MFIs reduce overlapped and thus potential over-indebtedness.

The answer to the question of whether to be concerned about over-indebtedness is obvious. Over-indebtedness hurts poor people, whose welfare is the declared objective of microfinance institutions, funders and government. And over-indebtedness tends to produce delinquency and default sooner or later, which will threaten the microfinance institutions' own viability. Sound risk management by MFIs cannot guarantee strong customer protection.

Therefore, we need to find out what the determinants of over-indebtedness are for microfinance clients and which clients are most at risk to have balanced consideration. Taking from customer protection perspective, it is contributed to find out the correlations of credit taking behaviors, multiple borrowing and lack of financial literacy with over-indebtedness.

1.2 Objective of the Study

The objective of the study is to analyze the determinants of over-indebtedness for microfinance clients.

1.3 Scope and Method of the Study

This study focuses to analyze the determinants on over-indebtedness in saturated area where market penetration of MFIs is too high. Dawpon Township is one of the saturated areas and it is selected as survey area for this study. Currently, 15 MFIs are providing microfinance services at Dawpon Township. The data consists of primary data and secondary data. Descriptive statistics method is used to analyze the data. For primary data, 133 respondents (10%) out of 1,300 microfinance clients who have taken loans from at least two microfinance institutions from Dawpon are selected by random sampling method. Respondents are conducted by face to face interview with structured questionnaires. Secondary data is obtained from websites, articles, working papers, news, journals and publications from NGOs.

1.4 Organization of the Study

This study is divided into five chapters. Chapter (1) presents a brief background of the intended study along with rationale of the study, objectives, scope and method of the study. Chapter (2) briefly explains on key concepts and principles of microfinance, role of MFIs in poverty alleviation and financial inclusion, over-indebtedness in microfinance clients, conceptual framework of previous study and conceptual framework of the study. Chapter (3) explains overview of microfinance sector in Myanmar, regulation and supervision of microfinance industry, financial inclusion in Myanmar and over-indebtedness in urban areas of Myanmar. In addition, it includes the status over-indebtedness of microfinance clients in Myanmar. Chapter (4) presents research design, demographic profile of the respondents, correlation coefficient between determinants and over-indebtedness and multiple regression analysis on determinants of over-indebtedness for microfinance clients. Chapter (5) provides the conclusion of findings, recommendations and need for further study.

CHAPTER II

THEORETICAL BACKGROUND

This chapter gives an overview of the microfinance which includes key concepts and principles of microfinance, role of microfinance institutions in poverty reduction and financial inclusion, over-Indebtedness of microfinance clients and conceptual framework of this study.

2.1 Key Concepts and Principles of Microfinance

According to the data released by (World Bank, 2018), globally, 1.7 billion (31 percent of world population) adults remain unbanked which means they do not have access to formal financial services. In 2004, that number was 2 billion. China has the world's largest unbanked population, followed by India (190 million), Pakistan (100 million), and Indonesia (95 million). Indeed, these four economies, together with three others; Nigeria, Mexico, and Bangladesh are home to nearly half the world's unbanked population. (Global Findex, 2017)

Microfinance services are included savings, insurance, loans, transfer services, microcredit and other financial products which provide to clients with low income. Microcredit is a small amount of money provided to the client by financial institutions. Because the poor people have no physical collateral and have a higher risk for payments in return of the borrowing money, the amount of money that they can borrow from financial institutions is relatively small.

Microfinance supports to build healthy domestic financial institutions that can provide financial services to poor people. The definition of microfinance includes not only microcredits but also other financial services, which can be offered to the poor to improve their standard of living and family welfare. One of the main assumptions of this concept is that the receiver of the money will be able to lift the economic condition of the household through creating self-employment with this manageable amount of money. Appropriately designed financial products and services enable many poor people to expand and diversify their economic activities, increase their incomes, and improve their self-confidence.

The access and cost of financial services matter to microfinance clients. Informal money lenders generally provide easy access to credit with high cost to many poor people, by charging borrowers with nominal monthly effective interest rates that typically range from about 10 percent to more than 100 percent which is many times more than the monthly effective rates of sustainable financial institutions, which are usually 2 to 5 percent per month. Even when real interest rates and transaction costs are included; it is normally far less expensive to borrow from a commercial microfinance institution than from a local money lender. Commercial microfinance institutions can also offer much in-demand savings services that provide savers with security, liquidity, and returns which is a combination not generally available in the informal sector (Robinson, 2001).

The key principles that summarize in 2004 by CGAP (Consultative Group to Assist the Poor) and endorsed at the G8 summit according to (CGAP, 2004) are as follows;

1. The poor need other form of financial services, not only just loans.
2. Microfinance is a powerful instrument against poverty.
3. Microfinance means building financial systems that serve the poor.
4. Financial sustainability is necessary to reach significant numbers of poor people.
5. Microfinance is about building permanent local financial institutions.
6. Microcredit is not always the answer.
7. Interest rate ceilings can damage poor people's access to financial services.
8. The government's role is as an enabler, not as a direct provider of financial services.
9. Donor subsidies should complement, not compete with private sector capital.
10. The lack of institutional and human capacity is the key constraint.
11. The importance of financial and outreach transparency.

2.2 Role of Microfinance in Poverty Alleviation and Financial Inclusion

Microfinance program has a positive impact on the lives of the poor. Microfinance has sensitized the health and education of society. It was based on improving the living conditions of the poor. Microfinance program improves access to

and control over resources and women's participation in decision-making. In a world where almost half of the population lives in poverty, offer microfinance innovation, small loans to low-income groups to generate income and employment for local authorities. Therefore, microfinance has been developed as an important tool for economic development of the developing countries. The poor have to wait long for the benefits of economic growth, which are separate from one another to a distance from urban areas, where economic activity is concentrated. It is important that this part of society is more convenient conventional balanced part growth for long-term sustainability of economic prosperity and social development is essential. It makes strengthening social, economic and financial services for people with low income who live in rural areas (Singla, 2014). Microfinance has a very important role to play in economic development. Microfinance plays the following significant roles in economic development:

Poverty Alleviation: Microfinance is an operating tool for raising the poor people by providing services to start or expand small businesses, enabling them to escape from poverty. This allows the poor to earn an income so that they can pay for food, drinking water, medical care, and education for their children. These small businesses also generate job opportunities for local communities where jobs are rare.

Women Empowerment: Microfinance is an important tool for women's empowerment. Poor women used small loans to start a small business and increase their revenue. It helps to empower women by supporting the participation of women in income generating and thus come up remarkably to gender equality. As Financial Inclusion, microfinance has made banking services can be funded by financial services, such as saving and obtaining funding.

Mobilization of Savings: Microfinance develops habit of saving to people. Low-income people also save money and become bankable.

Financial Stability: Microfinance provides financial stability to people who contribute to significantly. Small loans can provide additional income opportunities to pay for people's extreme needs.

Development of Skills: Microfinance helps to find potential rural entrepreneurs. Self Help Group (SHG) inspires its members to create their activities independently.

2.3 Over-indebtedness of Microfinance Clients

This section explains about the background cause of over-indebtedness of microfinance clients, and impact of over-indebtedness on social welfare.

For the long time, the main concern of microfinance was to provide access and deliver formal financial services, mainly credit to as many people as possible. Only few people were thinking about over-indebtedness. As late as April 2008, Deutsche Bank, the Boulder Institute, and CGAP convoked a group of practitioners and experts in microfinance sector to reflect together about the state of the industry, its risks, and its future. Each participant listed a few things that made them worried most about the industry and over-indebtedness was mentioned by only three among 35 participants. In *Microfinance Banana Skins 2008*, hundreds of practitioners, investors, analysts, and regulators rated credit risk as a less serious danger than nine other threats to the industry (Lascelles, 2008).

Three years later driven in large part by repayment crises in Bosnia–Herzegovina, Morocco, Nicaragua, Pakistan, and India, over-indebtedness of microcredit and its causes are the subject of intense discussion and a growing. Credit risk had climbed to the top of the list of microfinance threats in *Microfinance Banana Skins 2011* (Mendelson, 2011).

It is obvious that we need to concern about over-indebtedness. Over-indebtedness harms clients who are poor and low-income; whose welfare is the declared objective of most microlenders, funders, investors and governments. Moreover, over-indebtedness sooner or later leads to delinquency and default, which threaten the microfinance institutions' own viability. So, over-indebtedness should always be a concern, in principle.

2.3.1 Client Protection Principles: Over-indebtedness

Responsible financial inclusion is to make sure that clients do not borrow more money than they can repay or use products they do not need. Hence, it protects clients, businesses, and the industry as a whole. The Client Protection Principles are the minimum standards that clients should expect to receive when doing business with

a financial service provider. There is agreement within the financial inclusion industry that financial service providers should adhere to following core principles:

1. Appropriate product design and delivery
2. Prevention of over-indebtedness
3. Transparency
4. Responsible pricing
5. Fair and respectful treatment to clients
6. Privacy of client data
7. Mechanisms for complaint resolution

The Smart Campaign is a global effort to unite financial leaders around a common goal: to keep clients as the driving force of the industry. Protecting clients is not only the right thing but also the smart thing to do. According to second principle (Prevention of Over-indebtedness), providers have to take sufficient care in all phases of their credit process to determine that clients have the capacity to repay without becoming over-indebted. In addition, providers need to implement and monitor with internal systems that track over-indebtedness and support the prevention of it and will promote efforts to improve market level credit risk management such as credit information sharing among the microfinance institutions. (The Smart Campaign, 2019)

2.3.2 The Causes of Over-indebtedness

Credit plays an important role in the life of modern society. It helps people in consumption smoothing and hence in maintaining a lifestyle even when earnings fall short of expenditure. It also allows people to respond to unexpected events such as illness, job loss, and emergencies (Hodson, 2014). Credit allows individuals to start out a business by accessing start-up capital. It also allows individuals to finance their education enabling them to specialize in skills useful for industrial development. (Gregorio, 2000). In general, consumer credit has come to be regarded as empowering

consumers to make better lives for themselves by leveraging future earning potential (Kilborn J. J., 2005).

2.3.3 Over-indebtedness and its Consequences

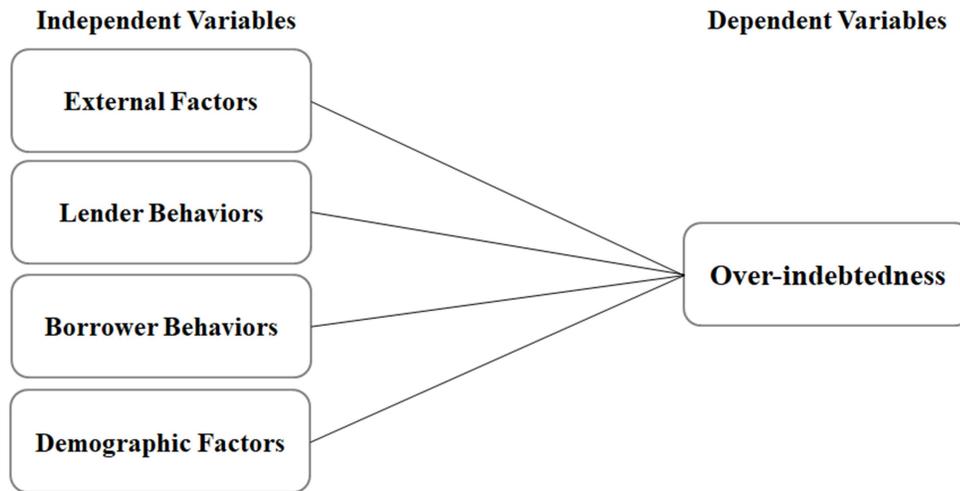
Over-indebtedness is concerning for it has serious consequences both at individual and at a macro level. At an individual level, over-indebtedness is related with an increased chance of emotional distress (Gathergood, 2012) and deterioration of well-being and/or mental health. Over-indebtedness is also associated with decreased self-esteem and social relationships (Wang, 2003). More concerning, over-indebtedness may increase a person's chance of involvement in crime as reported by (Lacombe, 2012) who find a link between the level of personal indebtedness and observed pattern of robberies and thefts in Ireland.

At a macro-level, over-indebtedness is observed to hamper consumption over business cycles and amplify recessions (Kukk, 2016). Over-indebtedness also increases non-performing loans that weakens bank balance sheets which may cause a credit crunch. According to the EU (2013), household over-indebtedness adversely affects the overall health of the economy by curtailing aggregate demand, employment, and growth. Over-indebtedness also leads to a social welfare loss (Nakajima, 2012).

2.4 Conceptual Framework of Previous Study

(Sunil, 2017) analyzed borrower over-indebtedness in microfinance, using multiple financial ratio based measures representing different sides of borrower's over-indebtedness namely, liquidity, debt absorption capacity and solvency of the borrowing household. This study shows that the occurrences of borrower over-indebtedness in microfinance are fairly wide spread. It is performed the analysis by categorizing the determinants of over-indebtedness broadly into external, lender related, borrower related and demographic factors using logistic regression framework as follows;

Figure 2.1: Conceptual Framework of Previous Study



Source: Sunil Puliyakot & H K Pradhan (2017)

This study based on the sampling of the microfinance borrowers from two districts of the Tamilnadu in Southern India according to its relevance for the microfinance industry. From the districts, urban and semi-urban borrowers were targeted for the study on a random basis. As the result of the research, it was found that external, lender related and demographic factors had a relatively higher influence in determining the levels of over-indebtedness of a borrower's household. The influence of borrower related factors were not as powerfully observed across multiple measures of over-indebtedness, as in the case of external, lender related and demographic factors. Environmental as well as institutional factors play significant role in pushing a borrower's household towards over-indebtedness.

Over-indebtedness is a serious concern in many countries across the globe, and it is actually at the forefront of policy making in many countries. The causes of over-indebtedness can be explained from clients' credit taking behaviors, multiple borrowing from several MFIs and lack of financial literacy.

- a. **Clients' Credit Taking Behaviors** - Behavioral science attributes over-indebtedness to impulsivity and overconfidence biases. According to (Anderloni, 2012), 'over-indebtedness is likely to happen to impulsive individuals, who may adopt impatient, short-sighted behaviour patterns which make it difficult for them to be fully aware of the consequences of their financial and spending decisions'. Individuals may also exhibit overconfidence bias in which they tend to be overly

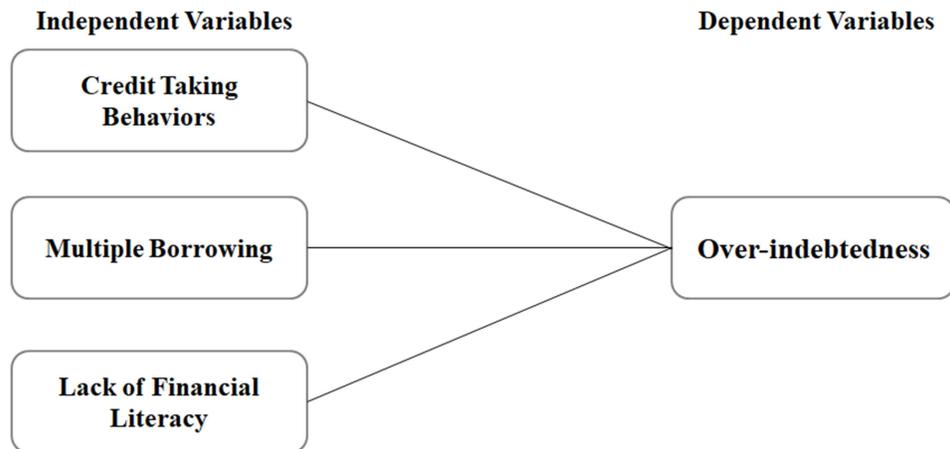
optimistic about their vulnerability to the problems of over-indebtedness (Kilborn J. , 2005). Kilborn (2005) reports that overconfidence is aggravated by ‘illusion of control’ that leads individuals to overestimate their ability to avoid negative events by controlling their behavior. Such behavior leads to the decision to purchase, using debt if necessary, regardless of the effect this choice may have on the sustainability of future debt levels (Vandone, 2010).

- b. **Multiple Borrowing** - Supply-side factors are also responsible for over-indebtedness of individuals. According to Kilborn (2005), intense competitive pressures forced lenders to advertise and structure their products in a manner that would take advantage of the psychological biases and weaknesses of their customers. Over-indebtedness can also be caused by cross-borrowing that happens when one lender fails to satisfy the borrower’s needs (Haile, 2015).
- c. **Lack of Financial Literacy** - The Organization for Economic Co-operation and Development (OECD) defines financial literacy as ‘a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing’ (OECD/INFE, 2016). According to (French, 2016), a lack of financial literacy has been found to be correlated with higher debt burdens, incurring greater fees, loan defaults and loan delinquency. Efforts to identify survey instruments have highlighted a number of different dimensions of financial literacy. Among the key components are numeracy and the money management skills of attention, budgeting and organizing bills. It is tested the effect on financial outcomes of money management skill versus numeracy using data on over-indebted members of credit unions in areas of social disadvantage in Northern Ireland (NI) and found that those with superior money management skills have reduced debt-to-income levels; are less likely to borrow from high cost lenders such as internet money lenders and high street loan shops.

2.5 Conceptual Framework of the Study

The conceptual framework for the study is constructed by considering the independent factors described above. They are credit taking behaviors, multiple borrowing and lack of financial literacy assumed to determine over-indebtedness.

Figure 2.2: Conceptual Framework of the Study



Source: Own Compilation (2019)

It can be seen a lot of people who are taking several loans from different MFIs. Normally, MFIs provide loan to each person in each household and it is not allowed to take overlapped loans for single client. If microfinance clients who wants another loans or if another household member from same household wants to take loan, there are some people so called agent to make it happen by taking incentive from microfinance clients. Those kind of informal services between MFIs and clients encourage multiple borrowing. Although it is small amount of credit itself, it will be burden for repayment when many microcredits are combined as large loan portfolio by taking one after one and plus MFIs interest and fee charged will duplicate the borrowing cost.

The conceptual framework of this study is constructed as shown in figure (2.2). These three dimensions are considered from the aspect of microfinance clients' protection based on literature review existed worldwide and current situation of microfinance market saturation in urban areas of Myanmar.

CHAPTER III

MICROFINANCE IN MYANMAR

This chapter includes the overview of microfinance sector in Myanmar, regulation and supervision of microfinance industry, financial inclusion in Myanmar, and over-indebtedness in urban areas of Myanmar.

3.1 Overview of Microfinance Sector in Myanmar

The World Bank Global Findex reported that emerging Myanmar has only 26 percent of the population banked. Recently, Myanmar has benefited from leapfrogging technology cycles and widely recognized as one of the last true frontier economies. The low trust and penetration of traditional banking methods in Myanmar is particularly chronic in the low income and rural areas where 70 percent of the population still reside. (microfinancesuccess, 2019)

Microfinance is a key development tool to promote financial inclusion and reduce poverty in Myanmar. Before the passage of the Microfinance Law in November 2011, only PACT UNDP was allowed to operate in Myanmar legally. All others operated without legal status preventing them from developing or scaling up their microfinance programs. Since then, most international NGOs and NGOs have received or will soon receive their microfinance licenses. Approximately 80 percent of total outreach and portfolio is accounted for by PACT UNDP. UNDP initiated a microfinance project during the second phase of UNDP's Human Development Initiative in 1997. The project activities were initially implemented by three international NGOs (Grameen Trust from Bangladesh in the Delta Region, GRET from France in Shan State, and PACT from the United States in the Dry Zone). In 2006, PACT was selected through an international bidding process to be the sole implementing agency (Eric Duflos, 2013).

In May 2011, the President U Thein Sein government approved a microfinance law and it has become formal microfinance industry and allowed to register the profit microfinance companies and approved lending to clients. The government gave its first framework to microfinance industry by 2011 Microfinance Business Law (MBL), which was followed by a series of rules and regulations. The

law established Myanmar Microfinance Supervisory Enterprise (MMSE) under the Ministry of Finance as the regulator of the microfinance sector in Myanmar. Business Supervisory Committee (MBSC) is the policy-making body for microfinance institutions. The framework allows local and foreign investors both to establish fully private-owned MFIs and provided the microfinance licenses, including existing microfinance providers that were providing informal microfinance services. The law was passed in Nov 2011 and granted licenses to 120 MFIs between November 2011 and November 2012. As of March 2019, FRD listed 181 licensed MFIs under its supervision which does not include cooperatives are working for microfinance activities in Myanmar as below table (3.1). The amount of the Paid-up capital of the Microfinance Institutions is totalling 476,719.63 million in Kyats and the amount of loans disbursement, totalling 2,614,017.46 million in Kyats has been made to over 1.5 million borrowers. Microfinance is being operated in 22,893 villages, 1,995 quarters and 242 townships at March 2019. (FRD, 2019)

Table 3.1: Number of Microfinance Institutions, Myanmar

Microfinance Institutions	Number
INGOs	3
NGOs	16
Local Companies	110
Foreign Companies	47
Partnership Firms	5
Total	181

Source: FRD, 2019

3.2 Regulation and Supervision of Microfinance Industry

Microfinance institutions are under governance of the Microfinance Business Law (MBL) 2011. The Financial Regulatory Department (FRD) is the in charge of supervising and regulating MFIs. The Ministry of Cooperatives supervises the financial cooperatives. The Rural Microfinance Supervisory Committee and Microfinance Business Supervisory Committee (MBSC) were formed under the Microfinance Business Law in order to provide support and guidance to the MFI's framework. Under MBL, the MBSC is the in charge of providing and implementing policy and directives. The committee also defines minimum capital requirements, license fees and sets interest rates on microfinance deposits, loans and other

associated charges in accordance with Central Bank procedures. The MBSC impose the administrative punishments on MFIs for non-compliance with terms and conditions included in license.

The law defines microfinance to provide micro-credit to low income people in Myanmar, accepting deposits, carrying out the remittance, insurance business and other financial services. The objectives of Microfinance Business Law are to alleviate the poverty; to improve health, education, social and economic conditions of the low income people; to create job opportunities; to develop the saving habit; to support the emergence of small-scaled businesses; to create and extend the businesses; to assist the low income people with earnings as well as agriculture and livestock breeding; and to acquire and circulate the technologies from local and abroad.

MFIs receive a one-year temporary license, which is converted into a full license after a regulatory review. The following table describes the judicial and regulatory requirements of Microfinance Business Law.

Table 3.2: Legislative/Regulatory Requirement for Microfinance Institutions

Capital	
Deposit Taking MFIs	MMK 300 Million
Non-Deposit Taking MFIs	MMK 100 Million
Interest Rates	
Loans	Maximum of 28% per annum
Voluntary deposits	Minimum of 10% per annum
Compulsory deposits	Minimum of 14% per annum
Loan sizes	
	Maximum loan size: MMK 10 Million
Collateral Requirements	MFIs cannot accept collateral for any types of loan products
Prudential Requirements	
Solvency ratio	12%
Liquidity ratio	25%
Qualification to be Deposit Taking MFIs	
	Minimum of 3 years' experience in carrying out microfinance activities in Myanmar
	Profits made for a minimum of 2 consecutive years
	Properly operating management information system (MIS)
	Strong internal controls
	Abidance by the prescribed rules
Liquidity Requirements	
Compulsory savings	May not exceed 5% of the loan balance

Voluntary savings	May not exceed 5% of the loan balance
For Deposit Taking MFIs	25% or greater, which is defined as: Liquidity ratio = (Cash in Hand + Cash in the Bank)/Total Voluntary Savings.

Source: FMR Myanmar Financial Services Report, 2018

The 2014 regulation also allowed MFIs to “utilize mobile payment systems when performing microfinance activities”, although the UNCDF notes that remittances were excluded.

The conditions included:

- Applying to the Central Bank and Ministry of Communications and Information Technology
- Following Central Bank directives on mobile banking
- Providing a plan to deal with clients’ limited knowledge of mobile payment systems

3.3 Financial Inclusion in Myanmar

According to the Financial Inclusion Roadmap (2014-2020) for Myanmar, the goal and direction is “By 2020, increase Financial Inclusion in Myanmar from 30% in 2014 to 40%, and adults with more than one product from 6% to 15%, with a full range of affordable, quality and effective financial services (which comply to internationally recognized standards on responsible finance) by getting all stakeholders to work together in an integrated manner”. The outcomes to make assured meeting with this goal are (1) to strengthen financial sector to be able to support financial inclusion, and (2) to ensure financial inclusion in three priority segments including agriculture, MSME and the low income (UNDP, 2014).

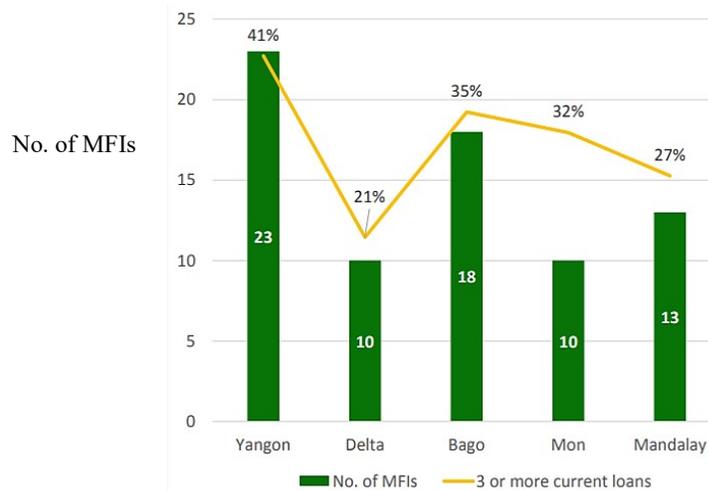
3.4 Over-indebtedness in Urban Areas of Myanmar

Currently there is no Credit Bureau in Myanmar and availability of microfinance market data is very limited. Non-Performing Loans (NPLs) are estimated to be very low but there is no clear visibility on defaulting clients. A few specific areas, mainly in Yangon, are showing signs of potential saturation. A pilot cross data analysis of clients from 5 MFIs in 2 townships shows increasing

overlapping of clients. Overlapping clients for each MFI of the pilot sample in a selected branch ranged from 27 percent up to 58 percent. (MMFA, 2019)

Over-indebtedness in certain urban areas has either become a problem or could become an issue. MFIs point to a rise in new lenders who focus on the same urban centres in Yangon, Mandalay, Bago and Ayeyarwaddy. At 2018, MMFA (Myanmar Microfinance Association) tested on five divisions (Yangon, Delta, Bago, Mon and Mandalay) for growing concern in Myanmar microfinance so that they can check there is emerging payment stress among microfinance clients.

Figure 3.1: Lending Pressure related to number of MFIs



Source: MMFA, 2018

According to (MMFA, 2018) report of division level finding on multiple borrowing and over-indebtedness,

Yangon - People take loans from 23 different MFIs, highest index of indebtedness and 2 of 3 respondents made repayments for other defaulters.

Delta – 1 of 5 loans were taken from moneylenders and borrowing from other sources is the most common. 73 percent of respondents received financial literacy training from PGMF, the dominant MFI in the division.

Bago – 12 percent of all were loans taken for debt repayment, mainly from MFIs and people rely equally on borrowing from other sources and taking extra work.

Mon – only 2-3 respondents had total loans of more than MMK 1 million and rely equally on group liability/savings or income in difficulties. Not many respondents received financial literacy training from MFIs.

Mandalay – Lowest average loan amount (similar to Delta) and highest proportion of those are reporting difficulties in repayments. Instead of group liability, people heavily rely on savings or income.

There are anecdotal reports of new and inexperienced lenders pursuing aggressive loans targets with limited credit assessment, which includes simply poaching existing customers from other MFIs that have more sophisticated credit screening systems.

Although demand for microfinance still exceeds supply, MFIs report that there is increasing competition among lenders in areas around Mandalay and the delta. MFIs report that at a meeting in December 2017 the regulator said that no more MFIs would be allowed to start operating in key urban centres including Yangon, Mandalay and Bago. Several MFIs reported that this verbal directive was also related to the MoPF's concern that there is too little MFI penetration into rural areas. MFIs said that at the December meeting, the regulator encouraged them to push more into rural areas. Despite concerns about over indebtedness, the non-performing loan ratios in the MFI sector remain exceptionally low. The largest MFIs report repayment rates of over 99 percent (Financial Service Report, 2018).

CHAPTER IV

ANALYSIS ON DETERMINANTS OF OVER-INDEBTEDNESS

This chapter includes research design, demographic profiles of the respondents, determinants of over-indebtedness, correlation coefficient between determinants and over-indebtedness and analysis on determinants of over-indebtedness for microfinance clients.

4.1 Research Design

This study examines determinants of over-indebtedness for microfinance clients (the borrowers). To support the assessment, the required data were collected through sample survey. As a survey instrument, a structured questionnaire was used.

As a sampling method, the random sampling was employed in this study. As a sampling process, samples are made from those who have borrowing from at least two MFIs. By this way, a sample of 133 respondents who are borrowing from at least two MFIs are chosen as a study sample. The chosen respondents were requested to complete the questionnaire. All 133 respondents kindly responded to the questionnaires. The questionnaire was conducted one by one face meeting.

As mentioned in Chapter one, this study completed in Dawpon township where is one of the MFIs saturated areas in Yangon Division and 15 MFIs are currently working there. There are 1,300 microfinance clients who have overlapping loans in Dawpon Township and those clients were considered as total population and 133 respondents (10% of population) were selected as sample size and those are with two or more loan borrowing from different MFIs.

4.2 Demographic Profile of the Respondents

This section presents the profiles of selected 133 royal clients who are borrowing more than two loans from different MFIs. The profiles cover the gender, age, marital status, education, household size, number of dependent in household, status of housing, employment status of clients, type of business, source of income, monthly income and monthly expense of sampled clients.

4.2.1 Gender of the Respondents

Among 133 respondents, there are not only females, but also males. Table (4.1) interpret the gender of respondents.

Table 4.1: Number of Respondents by Gender

Gender	Number	Percentage
Male	1	0.8
Female	132	99.2
Total	133	100.0

Source: Survey Results, 2019

As shown in Table (4.1), the sample gender consists of 1 male and 132 female. In terms of the percentage, female respondents share 99.2 percent of the sample while male respondents share 0.8 percent of the sample. According to MFIs' aim to alleviate poverty and women empowerment, female respondents are the majority of microfinance clients.

4.2.2 Age of the Respondents

Age of respondents is classified into five groups by age including under 30 years old, 31-40 years old, 41-50 years old, 51-60 years old, 61 years old and above in table (4.2) as below;

Table 4.2: Number of Respondents by Age Group

Age (in year)	Number	Percentage
Under 30	8	6.0
31 – 40	41	30.8
41 – 50	54	40.6
51 – 60	25	18.8
61 and Above	5	3.8
Total	133	100.0

Source: Survey Results, 2019

Ages of respondents are classified into five groups. 54 respondents fall into age group between 41 and 50 years old, followed by 41 respondents in age between 31 and 40 years old, 25 respondents fall in the age group of 51 and 60 years old, only 8 respondents are under 30 years old and remaining 5 respondents fall in the age of 61

years old and above group. In terms of percentage share by age group, the age group between 41 and 50 years old placed for the highest share of 40% whereas the age group of 61 years and above placed for the lowest share of 4%. This result proves that most of respondents who are using microfinance services at least from two MFIs are age between 41 and 50 years old.

4.2.3 Marital Status of the Respondents

Marital status of respondents is categorized as 4 groups; Single, Married, Divorced and Widow. Table 4.3 shows the marital status of respondents as following;

Table 4.3: Number of Respondents by Marital Status

Marital Status	Number	Percentage
Single	17	12.8
Married	96	72.2
Divorced	11	8.3
Widow	9	6.8
Total	133	100.0

Source: Survey Results, 2019

As shown in table (4.3) the largest sample of respondents is married, holding 72%, followed by single respondents which hold 13% of sample.

4.2.4 Education Level of the Respondents

The level of education can be considered as important factor that dominate financial decision making and attitude towards microcredit. Therefore it is essential to classify the respondents based on the education background. Respondents are classified into 5 groups consisting of primary school, middle school, high school, graduate and none of education which is given in the table 4.4.

Table 4.4: Number of Respondents by Basis Education Level

Education Level	Number	Percentage
Primary School	57	42.9
Middle School	45	33.8

High School	13	9.8
Graduate	14	10.5
None	4	3.0
Total	133	100.0

Source: Survey Results, 2019

According to the Table (4.4), it reveals that 43% of the total respondents had primary school education and 34% had middle school education as majority. Respondents who finished high school and respondents who graduated shared the same percentage (10%) and remaining 3% of the respondents had no education at all. Hence, we can assume that majority of MFI clients who are borrowing from at least two MFIs just had primary educational level.

4.2.5 Family Size of the Respondents

Another influencing factor is the client's family size. The classification of respondents on the basis of family size involves four categories.

Table 4.5: Number of Respondents by Family Size

Family Size(in person)	Number	Percentage
1 – 2	11	8.3
3 – 4	61	45.9
5 – 6	52	39.1
Above 6	9	6.8
Total	133	100.0

Source: Survey Results, 2019

Based on the data of Table (4.5), it indicates that 46% of the respondents were from families with three to four members and 39% of the respondents were with five to six members in their households. Remaining 15% are from families with four members and less than that. Hence, it proves that the more household members, the more probability to take several loans.

4.2.6 Number of Dependents of the Respondents' Household

Number of dependents in household of the respondents is measured as following;

Table 4.6: Number of Dependents in Household

Dependents(In person)	Number	Percentage
None	11	8.3
1 – 2	99	74.4
3 – 4	21	15.8
5 – 6	2	1.5
Total	133	100.0

Source: Survey Results, 2019

As per the data of table (4.6), we can notice that majority (74%) of respondents belong to household with one to two members and it reveals that having many dependents in household is not the reason of taking many loans from MFIs.

4.2.7 Employment Status of the Respondents

Employment status is the important factor which determines the earning capacity of the respondents. Employment status of the respondents were classified into five groups namely full time worker, part time worker, causal worker, self-employed and unemployed given in table (4.7).

Table 4.7: Number of Respondents by Employment Status

Employment Status	Number	Percentage
Full Time	9	6.8
Part Time	2	1.5
Causal Worker	11	8.3
Self-Employed	106	79.7
Unemployed	5	3.8
Total	133	100.0

Source: Survey Results, 2019

It indicates that majority (80%) of the respondents were included in the category ‘Self-Employed’ and remaining respondents worked as full-time worker, part-time worker, causal worker and unemployed.

4.2.8 Business type of the respondents

Business type of the respondents are categorised as three groups; Shop Owner, Service Work and none business as mentioned in the table (4.8);

Table 4.8: No. of Respondents by Type of Business

Business Type	Number	Percentage
Shop Owner	93	69.9
Service Worker	36	27.1
None	4	3.0
Total	133	100.0

Source: Survey Results, 2019

According to table (4.8), 70% of respondents are shop owner and 27% are service workers.

4.2.9 Monthly Income of the Respondents

It is important to analyse the income wise classification of the respondents because income is the main factor which determines the loan repayment capacity of respondents. So monthly income classification divided as five levels as per table (4.9) below;

Table 4.9: Number of Respondents by Monthly Income

Income (MMK)	Number	Percentage
Less than 200,000	6	4.5
200,001-500,000	87	65.4
500,001-800,000	35	26.3
800,001-1,000,000	4	3.0
Above 1,000,000	1	0.8
Total	133	100.0

Source: Survey Results, 2019

Out of 133 respondents, for 69% of the respondents, income per month was up to 500,000 MMK. For 26% of the respondents, the income range was 500,001-800,000 MMK per month. For 3% of the respondents, income per month was 800,001-1,000,000 MMK and only 1% can earn above 1,000,000 MMK on monthly basis.

4.2.10 Monthly Expenditure of the Respondents

Monthly expense by the respondents are categorised as below;

Table 4.10: Number of Respondents by Monthly Expenditure

Expenses (MMK)	Number	Percentage
Less than 200,000	48	36.1
200,001-500,000	85	63.9
Total	133	100.0

Source: Survey Results, 2019

From the table (4.10), it is observed that 64% of respondents were in the expenditure level of 200,001-500,000 MMK. And the rest 36% of respondents were less than 200,000 expenses on monthly basis.

4.3 Determinants of Over-indebtedness

To identify the determinants of over-indebtedness for clients from Microfinance institutions, the three dimensions are divided in this study as follows;

1. Credit Taking Behaviors,
2. Multiple Borrowing, and
3. Lack of Financial Literacy

This section presents that identification of independent variables (Credit Taking Behaviors, Multiple Borrowing and Lack of Financial Literacy) and dependent variable (Over-indebtedness).

4.3.1 Credit Taking Behaviors

In order to see the extent the behaviors of clients towards credit taking, ten statements are setup with five-point likert scale (1.strongly disagree, 2.disagree, 3.neutral, 4.agree and 5.strongly agree). The descriptive statistics like mean and standard deviation for agreement scores on each statement of credit taking behaviors dimension are calculated and presented in Table (4.11). The higher the average scores the higher the respondents' satisfied with the statement.

Table 4.11: Credit taking behaviors

No.	Statement	Mean	Std. Dev
1	I am willing to take a loan if I don't have enough money.	3.90	1.093
2	It is easy to access more credit even if a person already has large amount of debt.	3.91	1.158
3	I do not worry about the future; I live only in the present.	3.32	1.311
4	Saving is impossible for our family.	3.84	1.076
5	Almost all of my neighbours/friends take loans from MFI. So, I also do the same.	3.65	1.188
6	When taking a loan, I only look at the amount I have to pay each month regardless of interest and fees charged.	3.89	.963
7	I use credit because it is more convenient than saving money for a long time.	4.05	.979
8	I like to buy things; it makes me feel good.	3.29	1.342
9	It is very easy to get a loan from MFIs, so I use credit.	4.02	.961
10	I took loans due to adverse shocks have been faced such as large rise in price of food, live stocks' death, stolen of household asset, death of household member, own business failed and so on.	3.27	1.326
Total Average Scores		3.71	

Source: Survey Results, 2019

Table (4.11) shows that using credit due to being convenient more than saving money for a long time has the highest mean score of 4.05 with 0.98 standard deviation; while taking loan due to adverse shocks has the lowest mean score of 3.27 with 1.33 standard deviation. The highest mean score of statement No.7 shows that the respondents feel like using credit is more convenient than saving money for a long time.

Overall mean scores of credit taking behaviors is 3.71. Hence, it can be concluded that respondents are agreed on this dimension is positive and high.

4.3.2 Multiple Borrowing

In order to see the extent of the clients towards multiple borrowing, seven statements are setup with five-point likert scale (1.strongly disagree, 2.disagree, 3.neutral, 4.agree and 5.strongly agree). The descriptive statistics like mean and standard deviation for agreement scores on each statement of multiple borrowing dimensions are calculated and presented in Table (4.12). The higher the average scores the higher the respondents' agreed with the statement.

Table 4.12: Multiple Borrowing

No.	Statement	Mean	Std. Dev
1	MFIs' interest rate is affordable compared to informal lenders. That is the reason I took multiple loans from different MFIs.	3.90	1.093
2	MFIs are allowing taking multiple loans to same client even if they got informed from other MFIs within same market area.	3.91	1.158
3	MFIs' provided loan size for borrowers is too small.	3.32	.311
4	Social pressure leads me to take multiple loans from MFIs.	3.84	1.076
5	I take too much debt from MFIs for supporting my family because my income is not enough to cope it.	3.65	.188
6	I need to take another loan from another MFI to settle existing loan from current MFI.	3.89	.963
7	Financial requirement to start the business is not fulfilled by one MFI provided loan range. So, I have to take another loan from another MFI to meet my requirement.	4.05	.979
Total Average Scores		3.50	

Source: Survey Results, 2019

As results of Table (4.12) shows that financial requirement to start the business cannot be fulfilled by one MFI provided loan range and that is why respondents take another loan from another MFI has the highest mean score of 4.05 and .98 standard deviation; while too small loan size of MFIs has the lowest mean score of 3.32 with 0.31 standard deviation.

Overall mean scores of multiple borrowing is 3.50. Therefore, it can be concluded that respondents agreed on multiple borrowing dimension is positive and high.

4.3.3 Lack of Financial Literacy

In order to see the extent of lacking financial literacy of microfinance clients, ten statements are setup with five-point likert scale (1.strongly disagree, 2.disagree, 3.neutral, 4.agree and 5.strongly agree). The descriptive statistics like mean and standard deviation for agreement scores on each statement of lack of financial literacy dimension are calculated and presented in Table (4.13). The higher the average scores the higher the respondents' agreed with the statement.

Table 4.13: Lack of Financial Literacy

No.	Statement	Mean	Std. Dev
1	An investment with a high return is likely to be low risk	4.56	1.047
2	If I save all of my money in one place instead of investing in several businesses and keeping in several accounts, it is less likely to lose my money.	4.09	1.479
3	I am not familiar with banks and their products (Saving, Transfer, Remittance etc.)	2.96	1.819
4	It is better to keep cash in hand instead of keeping it in bank saving account.	3.17	1.824
5	I do not have knowledge about what kind of loan products currently offered by banks.	3.14	1.825
6	I do not understand what procedures to follow to get loan from banks.	3.40	1.838
7	I don't keep organized my financial records and I cannot find documents easily when I need them.	3.75	.995
8	I find it more satisfying to spend money than to save it for the long term.	3.78	1.061
9	I never monitor my income and expense monthly and I spend all I have.	3.72	.948

10	Personal/Family budget planning is extra job and I never do it to track my income and expenses.	3.69	.994
Total Average Scores		3.63	

Source: Survey Results, 2019

As results of Table (4.13) shows that investment with high return likely to be less risk has the highest mean score of 4.56 and 1.047 standard deviation on investment which produces high return leads to low risk; while unfamiliarity with banks and products of respondents has the lowest mean score of 2.96 with 1.819 standard deviation that indicates the respondents are familiar with banking product and services..

Overall mean scores of lacking on financial literacy is 3.62. Therefore, it can be said that respondents are agreed on their lack of financial literacy dimension is positive and high.

4.3.4 Over-indebtedness

In order to see the extent of over-indebtedness of microfinance clients, three statements are setup with five-point likert scale (1.strongly disagree, 2.disagree, 3.neutral, 4.agree and 5.strongly agree). The descriptive statistics like mean and standard deviation for agreement scores on each statement of over-indebtedness dimension are calculated and presented in Table (4.14). The higher the average scores the higher the respondents' agreed with the statement.

Table 4.14: Over-indebtedness

No.	Statement	Mean	Std. Dev
1	Credit taking behaviors increases over-indebtedness	3.71	1.028
2	Multiple borrowing increases over-indebtedness.	3.50	1.012
3	Lack of financial literacy increases over-indebtedness.	3.63	1.098
Total Average Scores		3.59	

Source: Survey Results, 2019

As results of table (4.14) shows that adverse shock and unemployment has the highest mean score of 3.62; while money mismanagement of the respondents has less score with 3.52.

Overall mean scores of over-indebtedness is 3.59. Therefore, it can be said that respondents are agreed on their over-indebtedness dimension is positive and high.

4.4 Correlation Coefficient between Determinants and Over-indebtedness

Pearson correlation is a statistical test that assesses the strength of the relationship between two numerical data variables (Saunders et al., 2009). Therefore, the relationship of independent variables (Credit taking behaviors, multiple borrowing and lack of financial literacy) and dependent variable (over-indebtedness) is measured via Pearson Correlation. The significance level is 0.05 in the Pearson Correlation test, which means there is 95% of confidence level. Hence, the hypotheses only can be accepted if the significant p-value is less than 0.05 (Malhorta, 2010).

Table 4.15: Correlation Coefficient between Determinants and over-indebtedness

Determinants		Over-Indebtedness
Credit Taking Behavior	Pearson Correlation	.522**
	Sig. (2-tailed)	.000
Multiple Borrowing	Pearson Correlation	.102
	Sig. (2-tailed)	.121
Lack of Financial Literacy	Pearson Correlation	.353**
	Sig. (2-tailed)	.000

Source: Survey Results, 2019

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

The table 4.15 shows that there is strong and positive relationship between credit taking behaviors and over-indebtedness, at the 0.01 significant level. It means the more credit taking behaviors, the more over-indebtedness. Similarly, there is strong and positive relationship between lack of financial literacy and over-indebtedness, at the 0.01 significant level. For multiple borrowing, it shows that there is negative relationship with over-indebtedness. It means that multiple borrowing will not impact to over-indebtedness as the respondents don't feel like they are over-indebted.

4.5 Analysis on Determinants of Over-indebtedness for Microfinance Clients

To analyse the determinants of over-indebtedness for microfinance client, the multiple regression analysis is conducted, and the results are reported in following Table.

Table 4.16: Multiple Regression Analysis on determinants of over-indebtedness

Variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	.136	.583		.233	.816	
Credit Taking Behaviours	.717	.128	.469	5.613	.000	1.317
Multiple Borrowing	-.041	.126	-.026	-.328	.743	1.229
Lack of Financial Literacy	.258	.098	.210	2.640	.009	1.190
N	133					
Adjusted R ²	.300					
F value	19.870** (.000)					

Source: Survey Results, 2019

In table (4.16), these results show that credit taking behaviours variable is significant at 1% level since the resulted p value is less than 0.01. The regression coefficient of credit taking behaviours is 0.717 at 1% significance level. If the credit taking behaviours increases by one unit, over-indebtedness will increase by 0.717, while other variables are remained constant.

Multiple borrowing is negatively significant variable in this analysis and if multiple borrowing increases by one percent, over-indebtedness will decrease by 0.026, while other variables are remained constant.

Lack of financial literacy variable is significant at 1% level since the resulted p value is less than 0.01. The regression coefficient of lack of financial literacy is

0.258 at 1% significance level. If lack of financial literacy increases by one percent, over-indebtedness will increase by 0.258, while other variables are remained constant.

The performance of the regression model, the value of adjusted R² is 0.300 that reveals 30% of total variation in over-indebtedness are explained by three factors: credit taking behaviours, multiple borrowing and lack of financial literacy. The value of F=19.870 is significant at P=0.000<0.01. Therefore, the regression model is statistically significant at 1% level with over-indebtedness of microfinance clients.

CHAPTER V

CONCLUSION

This chapter describes the conclusion of the study of determinants of over-indebtedness for microfinance clients from Dawpon Township, Yangon Division where is one of the saturated area of MFIs' target market. This chapter follows the findings and recommendations, as well as the suggestion for future study.

5.1 Findings

According to FRD, 83 MFIs are having microfinance license to operate in Yangon Division. Although it intended that growth of MFIs outreach to more customers and competition among MFIs can bring down interest rates and improve customer services, MFIs among urban areas of Myanmar are aggressively doing marketing to capture the remaining market share. The growth rate and saturation of microfinance market in Yangon could lead to microfinance clients over-indebted by increasing impulsivity of clients to encourage taking multiple loans. Clients need protection from irresponsible lender behavior. However, not only lender is responsible for over-indebting loan but also client's behaviors do according to this study.

The objective of the study is to analyze the determinants of over-indebtedness for microfinance clients by sampling with the respondents which have taken two and more loans from different MFIs from Dawpon Township. The finding revealed that there is a strong and positive relationship between over-indebtedness and determinants; credit taking behaviors and lack of financial literacy.

It can be assumed that even though there are multiple loans contracts by single clients, it cannot be issue as long as clients think they can repay it timely. But it should wait and see for long run. Since credit taking behaviors of clients have strong and positive relationship with over-indebtedness, most respondents want to take out loans from MFIs whenever it is available with ignorance of their need taking debt. It is indirectly related with aggressive marketing of MFIs which makes clients increased their impulsivity. Clients themselves underestimate the likelihood of adverse shocks, the amount of they have to repay, and overestimate their ability to repay in time. From financial literacy point of view, it is found that the respondents' money management

skill is quite low by checking their answers on knowledge and understanding of statements considered important in making saving, investment decisions and budget planning.

Regarding credit taking behaviors, the key cause of over-indebtedness is that the respondents express that spending money by taking credit is more convenient than saving for a long term and it is easy to get a loan from MFIs also. It is also found that getting credit easily causes the poor people less interested on savings and makes their willingness of taking loan increases whenever they feel like they need money. Regarding multiple borrowing, the respondents agreed that financial requirement to start the business is not fulfilled by one MFI provided loan range and relaxation on credit agreement which allows them taking multiple loans from different MFIs also lead to multiple borrowing. Regarding lack of financial literacy, the key influencing factor is that they think an investment with a high return is likely to be less risk and moreover, they want to keep cash in hand rather than saving or investing money at bank accounts or different investment.

In summing up on the findings, credit taking behaviors and lack of financial literacy make microfinance clients to be over-indebtedness.

5.2 Recommendations

Nowadays in Myanmar, commodity prices are rising time by time so people are struggling to maintain their daily living for their households and keep running their businesses well. It will be more difficult to survive if we do not have enough financial education. To reduce over-indebtedness, it is vital to make sure that microfinance clients are well educated how to deal with planning budget, calculating borrowing cost, making appropriate savings and investment decisions, so called money management skills in terms of financial literacy. As MFIs, onsite training about money management for clients are necessary to give before providing loans to them; just giving loan schedules and saying that is repayment amount to pay on time is not sufficient at all from client perspective.

Instead of delaying or stopping repayments when adverse shocks hit and debt becomes unmanageable, microfinance clients may encounter these shocks with personal sufferings. Although it looks like a success from a risk management point of

view because it keeps portfolio quality high is a serious concern from a social point of view. Instead of zero-tolerance delinquency policy, MFIs should be more careful for social welfare of clients while maintaining risk management standards.

Aggressive marketing by MFIs due to market saturations forces clients to take out loans regardless of their repayment capacity and MFIs' credit standards not to provide overlapped loans. It leads to multiple borrowing which is early warning sign of over-indebtedness. It encourages clients increase their impulsivity of taking multiple loans. And over-indebtedness tends to produce defaults and delinquency sooner or later which impact to MFIs' welfare also. Therefore, MFIs should improve their marketing, underwriting and loan management to avoid over-indebtedness as much as possible.

5.3 Need for Further Study

This study focused on determinants of over-indebtedness for microfinance clients in Dawpon Township, Yangon Division, Myanmar where MFIs are crowded providing microfinance services and one of most saturated areas by aggressive market penetration by MFIs. So the results of research might be vary based on situations which have different credit taking behaviors of clients, different financial literacy level and specific requirements by clients according to different geographical and economical situations of the area.

Hence, the research was limited by time and resource constraints and the researcher would like to suggest that a further detailed study should carry out to examine the determinants of over-indebtedness country wise.

REFERENCES

- Anderloni. (2012). Household financial vulnerability: An empirical analysis. *Research in Economics*.
- CGAP. (2004). Retrieved from [www.cgap.org](https://www.cgap.org/sites/default/files/Consensus-Guidelines-Key-Principles-of-Microfinance-Jan-2004.pdf): <https://www.cgap.org/sites/default/files/Consensus-Guidelines-Key-Principles-of-Microfinance-Jan-2004.pdf>
- CGAP (2004). Guidelines: *Key Principles of Microfinance*.
- Eric Duflos, P. L. (2013). *Microfinance in Myanmar Sector Assessment Report*.
- FMR Research & Advisory (2018). *Financial Service Report*.
- French, D. (2016). Financial literacy and over-indebtedness in low-income households. *International Review of Financial Analysis*. 48, 1-11.
- Gathergood, J. (2012). Self-control, financial literacy and consumer over-indebtedness. *Journal of Economic Psychology*, vol. 33, issue 3, 590-602.
- Gregorio, J. D. (2000). Credit Markets with Differences in Abilities: Education, Distribution, and Growth. *International Economic Review* Vol. 41, No. 3.
- Haile, H. B. (2015). Is there a Convergence or Divergence between Feminist Empowerment and Microfinance Institutions' Success Indicators? *Journal of International Development*, 27(7), 1042-1057.
- Hodson, R. (2014). Credit Card Blues: The Middle Class and the Hidden Costs of Easy Credit. *The Sociological Quarterly*. 55(2):31–40
- Kilborn, J. (2005). Behavioral economics, overindebtedness and comparative consumer bankruptcy: Searching for causes and evaluating solutions. *Bankruptcy developments*. Vol. 22(1), 13—45
- Kukk, M. (2016). How did household indebtedness hamper consumption during the recession? *Evidence from micro data*. *Journal of Comparative Economics*. vol. 44, issue 3, 764-786
- Lacombe, S. M. (2012). Personal Indebtedness, Spatial Effects and Crime. *University of Strathclyde Business School, Department of Economics*.

- Lascelles, D. (2008). *Microfinance Banana Skins 2008*. Landon: *Centre for the Study of Financial Innovation*.
- MMFA. (2018). Multiple borrowing amongst MFI clients: Findings from survey conducted in 5 divisions. *Micro-Credit Ratings International Limited*.
- OECD/INFE. (2016). *Adult Financial Literacy Competencies*
- Robinson, M. S. (2001). *The Microfinance Revolution: Sustainable Finance for the Poor*
- Schicks, J. & Rosenberg, R. (2011). Too Much Microcredit? A Survey of the Evidence on Over-Indebtedness. *CGAP occasional paper*.
- Sunil, P. & Pradhan, H. K. (2017). Determinants of over-indebtedness in microfinance: an empricial investigation. *World Development*.
- Singla, M. (2014). Microfinance and economic development in India: Growth and challenges. *International Journal of Research in Finance and Marketing* , 4(3), 1-13.
- Vandone, A. (2010). Risk of over-indebtedness and behavioural factors. *Universita Degli Studi Di Milano Working Paper*.
- World Bank (2017). *Global Findex Full report*
- Walker, T. (2016). Microfinance in Myanmar: A Silver Bullet to Stamp out Poverty? . *Myanmar Business Today*.
- Wang, P. S. (2003). The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication (NCS-R). *Journal of the American Medical Association*, 3095–3105.

APPENDIX

Yangon University of Economics

Department of Commerce

Master of Banking and Finance Programme

Questionnaire for Analysis on Determinants of Over-indebtedness for Microfinance Clients

I. Demographic Information of Respondents (Please tick)

1. Gender:
 Male Female
2. Age:
 Under 30 years 31-40 years 41-50 years 51-60 years 61 years and above
3. Marital Status:
 Single Married Divorced Widow
4. Education:
 Primary School Middle School High School Graduate Others
5. Number of family members in your household:
 None 1-2 3-4 4-5 Above 6
6. Number of dependents in your household
 None 1-2 3-4 4-5 Above 6
7. Employment Status
 Full Time Part Time Casual Worker Self-Employed Unemployed
8. Type of Business
 Shop Owner Service Worker None
9. Monthly Income (MMK)
 Less than 200,000 200,001 - 500,000 500,001 - 800,000 800,001 - 1,000,000 Above 1,000,000
10. Monthly Expense (MMK)
 Less than 200,000 200,001 - 500,000 500,001 - 800,000 800,001 - 1,000,000 Above 1,000,000

II. Analysis on Determinants of Over-indebtedness for Microfinance Clients

Please tick on the most appropriate scale on whether you (1) Strongly Disagree (“SD”), (2) Disagree (“D”), (3) Neutral (“N”), (4) Agree (“A”), or (5) Strongly Agree (“SA”) with the following statements.

I	Credit taking behaviors of borrowers	SD	D	N	A	SA
1	I am willing to take a loan if I don't have enough money.					
2	It is easy to access more credit even if a person already has large amount of debt.					
3	I do not worry about the future; I live only in the present.					
4	Saving is impossible for our family.					
5	Almost all of my neighbors/friends take loans from MFI. So, I also do the same.					
6	When taking a loan, I only look at the amount I have to pay each month regardless of interest and fees charged.					
7	I use credit because it is more convenient than saving money for a long time.					
8	I like to buy things; it makes me feel good.					
9	It is very easy to get a loan from MFIs, so I use credit.					
10	I took loans due to adverse shocks have been faced such as large rise in price of food, live stocks' death, stolen of household asset, death of household member, own business failed and so on.					

II	Multiple Borrowing	SD	D	N	A	SA
1	MFIs' interest rate is affordable compared to informal lenders. That is the reason I took multiple loans from different MFIs.					
2	MFIs are allowing taking multiple loans to same client even if they got informed from other MFIs within same market area.					
3	MFIs' provided loan size for borrowers is too small.					
4	Social pressure leads me to take multiple loans from MFIs.					
5	I take too much debt from MFIs for supporting my family because my income is not enough to cope it.					
6	I need to take another loan from another MFI to settle existing loan from current MFI.					
7	Financial requirement to start the business is not fulfilled by one MFI provided loan range. So, I have to take another loan from another MFI to meet my requirement.					

III	Lack of Financial Literacy	SD	D	N	A	SA
1	An investment with a high return is likely to be less risk.					
2	If I save all of my money in one place instead of investing in several businesses and keeping in several accounts, it is less likely to lose my money.					
3	I am not familiar with banks and their products (Saving, Transfer, Remittance etc.)					
4	It is better to keep cash in hand instead of keeping it in bank saving account.					
5	I do not have knowledge about what kind of loan products currently offered by banks.					
6	I do not understand what procedures to follow to get loan from banks.					
7	I don't keep organized my financial records and I cannot find documents easily when I need them.					
8	I find it more satisfying to spend money than to save it for the long term.					
9	I never monitor my income and expense monthly and I spend all I have.					
10	Personal/Family budget planning is extra job and I never do it to track my income and expenses.					