

**ADDIS ABABA UNIVERSITY COLLEGE OF BUSINESS
AND ECONOMICS
DEPARTMENT OF ACCOUNTING AND FINANCE**



**ASSESSEMENT OF FINANCIAL PERFORMANCE OF
MICROFINANCE INSTITUTIONS IN ETHIOPIA**

By

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A Thesis submitted to school of graduate studies of Addis Ababa University
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(MSc) in Accounting and Finance

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STATEMENT OF DECLARATION

I, Fekadu Demissie Tadesse, declare that this study entitled “Assessment of Financial performance of Microfinance institutions in Ethiopia” is my own work. I have carried out independently the research work with guidance and support of the research advisor.

This study has not been submitted to degree/diploma in this or any other institutions. It is done in partial requirement of the M.SC degree in Accounting and Finance.

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STATEMENT OF CERTIFICATION

This is to certify that Fekadu Demissie Tadesse has carried out his research on the topic entitled “Assessment of Financial performance of Microfinance institutions in Ethiopia”.

This work is original in nature and is suitable for the award of M.SC degree in Accounting and Finance.

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Table of Contents

Table of Contents	i
List of Figures	iv
List of Tables	iv
ACKNOWLEDGMENTS	vi
ABSTRACT	vi
ACRONYMS AND ABBREVIATIONS	vii
CHAPTER ONE	1
INTRODUCTION	1
1.1. Background of the study	1
1.2. Statement of the problem	4
1.3. General objective.....	6
1.3.1. Specific Objectives	6
1.4. Research Questions	7
1.5. Scope of the study	7
1.6. Significance of the study	7
1.7. Limitation of the study	8
1.8. Organization of the study	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.1. Introduction	9
2.2. Theoretical review.....	9
2.2.1. Definition of microfinance	9
2.2.2. History of microfinance institutions	10
2.2.3. Two schools of thought in microfinance	12
2.2.4. Benefits of microfinance in developing countries.....	13
2.2.5. Key principles of microfinance	19
2.2.6. Challenges faced by microfinance institutions.....	22
2.2.7. Criticisms of microfinance	23

2.2.8. Performance Measurements of in microfinance	23
2.2.9. Difference between microfinance and traditional banking services.....	24
2.2.10. Determinants of performance of MFIs	26
2.2.10.1. Internal determinants	26
2.2.10.2. External Factors	28
2.3 Empirical Literature review	28
2.4. Research Gap.....	31
2.5. Conceptual framework	31
CHAPTER THREE	33
RESEARCH METHODOLOGY AND DESIGN	33
3.1 Research Methodology.....	33
3.2. Research design.....	34
3.3. Research method	34
3.3.1. Source of data	34
3.3.2. Data gathering tools.....	34
3.3.3. Target Population	34
3.3.4. Sampling technique and sample size.....	35
3.3.5. Data analysis techniques.....	35
3.4. Description of Variables.....	35
3.4.1. Dependent variable	36
3.4.2. Independent variables	36
3.5. Ethical considerations	38
3.6 Data Reliability and Validity.....	38
CHAPTER FOUR.....	39
DATA ANALYSIS AND INTERPRETATION	39
4.1. Outreach indicators	39
4.1.1. Breadth (number of clients served)	40
4.1.2. Outreach – Depth (client poverty level)	43
4.2. Loan repayment (portfolio quality).....	44
4.3. Sustainability and profitability of MFIs.....	46
4.3.1. Operational Sustainability (OSS)	46

4.3.2. Financial sustainability (FSS).....	46
4.3.3. Return on Equity (ROE) and return on asset (ROA).....	48
4.4. Efficiency and productivity of MFIs (2010-2018).....	51
4.5. Size MFI (Total Asset).....	55
4.6. Age of MFIs	56
4.7. Peer group performance measurement of MFIs.....	57
4.7.1. Return on Asset and Return on Equity	57
4.7.2. Operational and Financial self-sufficiency.....	59
4.7.2.1. Operational self-sufficiency (OSS).....	59
4.7.2.2 Financial self-sufficiency (FSS)	60
4.7.3 Efficiency of peer category.....	61
CHAPTER FIVE	63
CONCLUSIONS AND RECOMMENDATIONS	63
5.1 Summary and Findings	63
5.2 Recommendations	65
5.3 Scope for further research	65
References.....	66

List of Figures

Figure 1: Conceptual framework of Dependent and independent variables.....	32
Figure 2: Number of active borrowers.....	41
Figure 3: Outstanding loans and savings balance of 37 MFIs in Ethiopia (2010-2018).	41
Figure 4: Outreach of depth of Indicator	44
Figure 5: Profitability indicators of OSS & FSS	47
Figure 6: ROA and ROE trend analysis.....	50
Figure 7: Trends of operating expense ratio	53
Figure 8: Trend in cost of borrowers	54
Figure 9: Personnel productivity ratio	54
Figure 10: Total asset shares.....	55
Figure 11: Returns on Equity of Category A, B and C MFIs (2010-2018)	58
Figure 12: Returns on Asset of Category A, B and C of MFIs (2010-2018).....	58

List of Tables

Table 1: Outreach (breadth) trends in Ethiopia (2010-2018).....	40
Table 2: Trends of depth of outreach indicators (2010-2018)	43
Table 3: Portfolio at risk >30 days (Non-performing loans)	45
Table 4: Operational self-sufficiency (OSS) and financial self-sufficiency (FSS) (2010-2018)..	47
Table 5: ROA and ROE trend analysis (2010-2018).....	50
Table 6: Trends in efficiency and productivity ratio (2010-2018)	52
Table 7: Classification of MFIs by age (New, young & mature)	56
Table 8: ROA and ROE of MFIs category A, B and C (2010-2018)	57
Table 9: Operational self-sufficiency (OSS) & financial self-sufficiency (FSS) of category A, B and C MFIs (2010-2018)	60
Table 10: Peer group OER of category A, B and C Ethiopian MFIs (2010-2018).....	61

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ABSTRACT

The Ethiopian MFIs are growing fast in terms of financial sustainability and outreach. But there are millions of people that are in need of financial services. The objective of this study was to assess the financial performance of MFIs in Ethiopia. Therefore, twenty seven audited MFIs operating in Ethiopia had been selected for performance assessment. To analyze outreach, loan repayment (portfolio quality), financial sustainability, financial profitability and efficiency indicators were used. Based on Peer category of national bank of Ethiopia, the MFIs were classified into three and this was considered as an important factor to compare each category based on maturity, size, breadth of outreach, and operation scale. This study is based on quantitative research approach using panel data as the main data analysis technique. The study was based on a 9 years' secondary data of 27 audited MFIs of Ethiopia obtained from the national bank of Ethiopia. This study specifies how the Ethiopian MFIs stand in terms of outreach, financial profitability, financial sustainability and efficiency. A financial ratio such as return on asset (ROA), return on equity (ROE), financial self-sufficiency (FSS), and operational self-sufficiency (OSS) was used. Moreover, descriptive statistics was used for the study to know how they are performing their operation. The result of the study shows that performances of MFIs are poor in terms of FSS which is below breakeven point implies that MFIs are subsidy dependent. Depth of outreach deviates from their mission as they are not reaching many poor people living under the poverty line. Regarding to ROA, the average value is less than standard which implied that the profitability is not encouraging. Therefore, their performance needs to be improved as they were not covering their financial breakeven to mean that some of the MFIs in Ethiopia cannot cover their operating expense, but are good in terms of breadth of outreach, efficiency, portfolio quality and ROE.

Keywords: Microfinance, performance, sustainability, profitability, outreach, efficiency

ACRONYMS AND ABBREVIATIONS

AEMFI	Association of Ethiopia Microfinance Institutions
CGAP	Consultative Group to assist the poorest
ROA	Return on Assets
ROE	Return on Equity
FSS	Financial Self Sufficiency
OER	Operating Expense Rate
NGOs	Non-governmental Organizations
IFC	International Financial Corporation
MFI s	Micro finance Institutions
CEO	Chief executive Officer
CFO	Chief Financial Officer
PAR	Portfolio At Risk
NBE	National Bank of Ethiopia
GNI	Gross National Income
NA	Not Available
OSS	Operational Self-Sufficiency
ACSI	Amhara Credit and savings Institution
ADCSI	Addis Credit and Savings institution
DECSI	Dedebit Credit and Savings Institution
OCSSCO	Oromia Credit and Savings Share Company
SFPI	Specialized Financial and Promoting Institution
SEEP	Small Enterprise Education and Promotion Network

CHAPTER ONE

INTRODUCTION

This chapter of the research explains the background of the study, Background of the organization, statement of the problem, objective of the study, research questions, the scope of the study, significance of the study, limitation of the study and organization of the study.

1.1. Background of the study

The formal financial institutions have little role in financing development efforts in the rural areas because they are clustered in urban conglomerations, concentrate on finding large in accessible to the rural poor especially in terms of distance. In addition to this, the rural poor cannot fulfill banking requirements to obtain bank loans/credits. Besides, banking requirements for collateral/material guarantee and intrinsic banking procedure which in most cases is very difficult for the poor to deal with, the volume of loan demanded by farmers/poor is not appealing to the bank. Usually small farmers/poor require small loan size that is known as micro-loan or micro-credit and micro-finance services. Thus, possessing a small or micro-loan is not financially feasible and it is difficult to manage. So, as a result the formal financial institutions such as banks are reluctant to finance the demand of small farmers or lend small loans. On the other hand, credit from informal sources is inadequate and moreover, the interest charged on such loan is excessively exploitive or costly nature of informal financial sources of finance led to the establishment of specialized financial institutions (Yirsaw, 2008). Microfinance is highly considered as one of the most effective tools to improve the life of the poor especially in developing countries.

According to the world bank reports, an estimated of more than three billion people in developing countries have little or no access to formal financial services that can help them increase their incomes and improve their lives. Access to a range of microfinance services savings, loans, micro insurance, and money transfers enable the poor families to invest in enterprises and in better nutrition, improved living conditions and the health and education of

their children. The evolution of the industry has been driven by many factors which include the transformation of micro finance providers, the sizeable supply gap for basic financial services, the expansion of financing services supporting the industry and the use of technology. As the industry, has developed, there has been a shift from specialized NGOs to an increasing number of regulated and licensed MFIs which stress that sustainability and impact go hand in hand (IFC, 2019).

Poverty is the main cause of concern in improving the economic status of developing countries. Microfinance is an organization that offers financial services to low income populations. Almost all give loans to their members, and many offer insurance, deposit and other services. Milton Friedman once said that “the poor stay poor, not because they are lazy, but because they have no access to capital. “ Still in this 21st century, a huge section of population of the globe remains outside the formal banking system. MFIs are equipped to react this massive population.

Microfinance allows people to better provide their families, gives access to small amounts of credit, offers better overall repayment rate than traditional banking products. It also gives families an opportunity to provide an education to their children, creates the possibilities of future investments. Microfinance is also able to let entrepreneurs in developing countries be able to create new employment opportunities for the others. When more people able to earn an income, the rest of the local economy also benefits because there are more revenues available to move through local business and service providers. Grammen bank in Bangladesh employs over 21,000 people and their primary financing products are related to microfinance. Tens of thousands of jobs that are created by the industry with the sole purpose of being able to drag people to save, reduces stress. In many developing nations the primary recipients of micro loans tends to be women. Up to 95 % of some loan products are extended by microfinance institutions are given to women. Those with disabilities, those who are unemployed, and those who even simply beg to meet their basic needs are also recipients of micro finance products that can help them take control of their own lives. Continuous efforts towards automation of operations are steady inefficiency. The automated systems have also helped to accelerate the growth rate of the microfinance sector (Ayres, 2019).

The goals for MFIs is should be to improve the quality of the life of the poor by access to financial and support services, to be viable financial institutions developing sustainable

communities, to mobilize resources in order to provide financial and support services to the poor, particularly women, for viable productive income generating enterprises enabling them to reduce the poverty, learn and evaluate what helps people to move out of poverty faster, to create opportunities for self-employment for the under privileged. (Gupta, 2011) ; (Welday, 2005).

Microfinance is relatively new to Ethiopia and come to appear in 1994s with the government's licensing and supervision of microfinance institutions and proclamation designed to encourage MFIs to extend credit to both the rural and urban poor of the country. Following this, several microfinance institutions were established and have been preparing in providing access to financial services to poor, rural family and people engaged in other similar activities as well as micro and small-scale enterprises and entrepreneurs. Almost all the MFIs operating in the country have the dual mission of reaching poor clients and being financially sustainable (Welday, 2005). Before the emergence of MFIs in Ethiopia, financial services have been delivered for several years by projects designed by government ministries, departments and non-governmental organizations (Tadesse, 2010).

In Ethiopia microfinance services were introduced after the fall of the Dergue regime following the policy of economic liberation. Microfinance is taken as a shift from government and NGO subsidized credit programs to financial services run by specialized financial institutions. With this shift some NGO and government microcredit programs were transferred to microfinance institutions (Degefe Duressa, 2009).

The decision of the government of Ethiopia to liberalize and restructure the financial sector in the 1990,s had a significant impact on the growth of MFI's. Ethiopia laid down a legal frame work for micro finance institution (MFIs) by proclamation No.40/1996.The issuance of this proclamation, seen as an important breakthrough followed by a number of regulatory directives and policies that help to protect and ensure the prudential safety of financial institutions. (Hayleyesus, 2016.)

Since the implementation of the above proclamation (Proclamation No 40/1996), the number of microfinance institutions and their clients are increasing from time to time. It is one of the world's fastest growing microfinance sectors.

The Ethiopian microfinance market is dominated by a few large players, all of which are closely linked to regional government ownership. The legal instrument which regulates micro-financing institutions in Ethiopia is licensing and supervision of micro-financing business proclamation No 629/2009.

A feature of all Ethiopian MFIs is that they are actively involved in savings mobilization. Savings are central to Ethiopia MFIs and provide an important source of funds for lending. The two types of individual saving include compulsory savings which stay with the MFIs until the client leaves the program and voluntary saving which the client can withdraw anytime (Tadesse, 2010).

Other sources of funds are support from government, donated capital (Equity) from regional governments, donated equity from international NGOs and others.

Currently, in Ethiopia there are more than 38 MFIs which deliver credit, savings local transfer and drawing and accepting drafts payable within Ethiopia, micro-insurance business purchasing income generating financial instruments such as treasury bills and other short term instrument, supporting income generating project of urban and micro and small scale operators managing funds for small scale businesses, providing financial leasing services to peasant farmers, micro and small-scale urban and rural entrepreneurs etc. These MFIs are registered and regulated by National Bank of Ethiopia. (Pro.626/2009). The MFIs accept some guarantees like Group guarantee, salaries of permanent employees, customers of the institutions, persons and machineries joint guarantee house hold furniture, land lese etc.

1.2.Statement of the problem

The primary objective of MFIs is to provide financial services to the poor in order to mitigate the financial constraints and help to alleviate poverty. Each MFI tries to maximize its repayment performance, servicing more able poor client, and tires to retain them for a long period of time.

Even though, micro finance is said to be an effective tool to mitigate several social and economic problems of poor mass, still there is a huge gap to bridge between the targeted objectives and reality. There is a need to study how micro finance institutions are functioning in Ethiopia towards eradication of poverty and evaluating their performance. And, it is also believed that

these findings will be helpful to policy makers for better decisions (Ramanaiah & Gowri, 2007). Some of the indicators of effective MFIs are the loan performance of the borrowers, client retention performance, and outreach performance (Goodquin, 2004). High repayment rate gives benefits both to the MFI and borrowers. If there is high repayment rate, the relationship between the MFI and their clients will be healthy. High rate helps to obtain the next higher amount of loan and other financial services. In contrast, if there is low repayment rate, both the borrowers and the MFI will be affected. In this case the borrowers will not be able to obtain the next higher loans and the lenders will also lose their clients.

In Ethiopia, the formal base of MFIs has been laid by the issuance of proclamation No.40/1996, which is repealed by proclamation No 626/2009. The proclamation has established the licensing and supervision of MFIs as share companies with objective of providing financial services for low income society which are not included in the formal banking sectors. This is because due to collateral requirements the poor could not have access to loan services from commercial banks. Hence, by providing loan to marginalized groups, MFIs are expected to provide loan services and to make profit for their existence (Welday, 2005).

Poverty and food security are the main challenges and fundamental issues of economic development in Ethiopia. At the same time famine, disease, civil strife, and unwise policies were part of its history. Almost all indicators identify Ethiopia as one of the poorest countries on earth. The major cause of low economic growth and high incidence of poverty in Ethiopia includes lack of income, assets, employment opportunities, skills, education, health and infrastructure (Amaha W. , 2009).

Though, microfinance is among the youngest industry in Ethiopia and other developing countries, it has gained increasing policy makers' and researchers' attention for the fact that the microfinance revolution has been resulting significant socio-economic changes across the world. Consequently, many researchers conducted research on performance of MFIs in Ethiopia. For instance, (Abdi & Batra, 2018) conducted a research on Performance Analysis of Microfinance Institutions in Ethiopia in terms of outreach and financial sustainability; other studies conducted on Financial Sustainability of Microfinance Institutions (MFIs) in Ethiopia; (Degefe Duressa, 2009) studied on assessing performance of MFIs in terms of sustainability focus on cost and performance of finance services in relation to volume (scale) of operation. There are also many

similar studies conducted by different scholars. However, some of the studies tried to assess the performance of MIFs using few performance metrics (indicators) and some of them used 3 to 7 years data, which may lack sufficient information to assess the overall performance of MFIs in Ethiopia. Other studies are not recent. (Yirsaw, 2008), Moreover, others tried to assess the performance of one MFI only, which is to generalize the findings of the MFIs in Ethiopia. (Chala & Dessie, 2016).

Thus, by considering the above mentioned defects of various studies conducted on performance on MFIs, this study is focused on filling these research gaps by focused on assessing the performance of microfinance institutions in Ethiopia with the help of recent panel data of nine years (2010-2018) and using multiple performance metrics such as measuring outreach, loan repayment, financial sustainability and measuring efficiency which in turn indicates that whether the selected MFIs are financially and operational sound or not.

1.3.General objective

The main objective of this study is to assess the financial performance of microfinance in Ethiopia using multiple performance indicators.

1.3.1. Specific Objectives

The specific objectives of the study are

- To assess the outreach status of the performance of microfinance institutions in Ethiopia by using number of client served and client poverty level.
- To examine financial sustainability of microfinance institutions in Ethiopia
- To evaluate the efficiency of microfinance institutions in Ethiopia
- To assess the status of loan repayment of microfinance institutions in Ethiopia
- To survey the performance of microfinance institutions in Ethiopia in terms of their age and size.
- To realize the effect of outreach, loan repayment, and efficiency on microfinance institution in Ethiopia.

1.4. Research Questions

The paper tried to answer the following questions

1. What is the outreach status of the performance of microfinance institutions in Ethiopia?
2. Do microfinance institutions in Ethiopia are financial sustainable?
3. Are microfinance institutions in Ethiopia efficient in terms of operational expense ratio?
4. What is the status of loan repayment of microfinance institutions in Ethiopia?
5. Do age and size of microfinance institutions in Ethiopia are promising for well performance?
6. Do the outreach, loan repayment, and efficiency have an effect on microfinance institution in Ethiopia?

1.5. Scope of the study

There are different micro-finance institutions that are operating at national level and there are also financial institutions that operate only in Addis Ababa. However, according to the availability of audited financial statements data and make the study manageable and evaluate the problem in detail, the researcher is forced to study the performance of only 27 MFIs which are currently operating in different parts of the country from 2010 – 2018 fiscal periods' secondary data.

1.6. Significance of the study

The study might be useful for those who are interested in further research study on financial performance of microfinance institution in Ethiopia. It may also be helpful for MFIs to mitigate their performance problems. And also the finding and the recommendation of this research is very essential to previously established microfinance institutions and a newly comer microfinance institution in Ethiopia. To previously established MFIs, the study will show their level of financial performance and this in turn will help them to take appropriate actions on identified variables. To newly comer MFIs, the results will assist to develop selection criteria for their investments. To regulators, this study will contribute to set financial performance standards.

1.7. Limitation of the study

This study focuses on financial and performance of MFIs in Ethiopia taking selected MFIs. In addition the study is based entirely on secondary sources of data due to lack of primary data like interviews, time and information, for example, external factors which determine the financial performance of MFIs constraints. Except these limitations the study is believed to represent the true performance of the institutions.

1.8. Organization of the study

The study will be organized in five chapters:

Chapter one consists of the introduction part, background of the study, statement of the problem, research questions, general and specific objectives of the study, scope of the study, significance of the study, limitation of the study.

The second chapter discusses the literatures available in the area of the performance of MFIs, which includes theoretical, empirical, conceptual frame work of the study and research gap.

Methodology of the research, which includes research design, the data collection and tools, the source of the data, sampling techniques, data analysis methods and description of variables to be used in the research has been presented in the third chapter.

The fourth chapter presents the results and discussions of the study based on data collected by the researcher from secondary source of data. The final chapter consists of summary of findings of the research work concluding the results and forwarding recommendations based on the findings of study.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter deals with different theories, definitions, history, thoughts, benefits of MFIs in developing countries, key principles, challenges faced by microfinance institutions, criticisms, Performance measurements of MFIs, difference between microfinance and traditional banking services, empirical literature reviews, and findings from previous microfinance literatures and research gap.

2.2. Theoretical review

2.2.1. Definition of microfinance

Various definitions of microfinance have been given which give on insight to their aim, scale and nature of financial services provided by the MFIs and those which describe the characteristics of the users of these financial services.

Microfinance is the provision of a broad range of financial services such as deposits, loans, payment services, money transfers and insurance products to the poor and low-income households for their micro enterprises and small businesses to enable them to raise their income levels and improve their living standard.

In other words, micro finance is the arrangement of financial services including loans, savings, insurance, money transfer and remittances offered to the lower income groups or poor entrepreneurs, who otherwise cannot avail the standard banking services. The motive behind microfinance is to give people in poverty a privilege to become self-sufficient by offering them crucial banking services at considerable smaller monetary amounts. Therefore microfinance institutions (MFIs) are organizations that provide both social and financial services to the poor.

2.2.2. History of microfinance institutions

The history of micro financing can be traced back to the middle of the 1800s when the theorist Lysander Spooner was writing over the benefits from small credits to entrepreneurs and farmers as a way getting the people out of poverty. But it was at the end of World war II with marshal plan the concept had big impact (Stanley, 2018).

There have been informal and formal credit and savings institutions for the poor around the world for centuries, one of the earliest and longer -lived microcredit organizations, which provided small loans to rural poor without collateral, were the Irish loan fund system, founded by author and nationalist Jonathan Swift at the beginning of the eighteenth century. In the 19th century, a wide range of larger and more savings and credit institutions started to emerge in Europe. These institutions which were organized primarily among the rural and urban poor were known as people's Banks savings and credit co-operatives and credit unions (Morin, 2018).

The today use expression of microfinance has its roots in the 1970's when organizations, such as Grameen Bank of Bangladesh with the microfinance pioneer Mohammed Yunus, were starting and shaping the modern industry of micro financing. Another pioneer in this sector is Akhtar Hammed Khan .At that time a new wave of microfinance initiative introduced many new innovations into the sector. Many pioneering enterprises began experimenting with loaning to the underserved people .The main reason why microfinance is dated to the 1970's is that the program could show that people can relied on to repay their loan and that it is possible to provide financial services to poor people through market based enterprises without subsidiary (Scheyvens, 2015).

Friedrich Whiliam Raiffeisen and his supporters developed the concept of credit union. They wanted to help the rural population become less dependent on money lenders and to improve their welfare. From 1870, the unions expanded rapidly across the Rhine province and other regions of German states. Then the movements quickly spread to other European countries and to North American, eventually reaching developing countries as well. The Indonesian people's credit banks or the Bank Perkreditan Rakyat opened in 1895 and became the biggest microfinance in Indonesia. Various adaptations of these models started to appear across rural

Latin America at the beginning of the twentieth century. Unlike the banks in Europe, which were owned by the poor themselves, these new banks were owned by government agencies or private banks. Over the years, these institutions became inefficient and sometimes abusive.

In the 1800s, Europe saw the emergence of larger and more formal savings and credit institutions that focused primarily on the rural and urban poor. The movement emerged in France in 1865 and Quebec in 1900. Many of today's financial cooperatives in Africa, Latin America and Asia find their roots in this European movement. Another early example is the Indonesian people's credit Banks (BPRs) that in 1895 and became the largest microfinance system in Indonesia, with close to 9,000 branches (Amaha & Kifile, 2016).

When Mohammed Yunus started making small loans to local villagers in 1970's it was unclear where the idea would go. Around the world scores of state –run banks had already tried to provide loans to poor households, and they left a legacy of inefficiency, corruption, and millions of dollars of squandered subsidies. Economic theory also provided ample cautions against lending to low-income households that lack collateral to secure their loans. But Yunus vowed to one day make profits and he argued that, his poor clients would pay back the loan reliably. Today, Mohammed Yunus is recognized as a visionary in a movement that has globally, claiming over 65 million customers at the end of 2002. They are served by microfinance institutions that are providing small loans without collateral, collecting deposits, and increasingly selling insurance, all to customers who had been written off by commercial banks as being unprofitable.

Advocates see the changes a revolution in thinking about poverty reduction and social change, and not just as a banking movement. The movement has grown through cross-pollination. Mohammed Yunus's Grammen Bank has now been replicated on five continents (Aghion & Morduck, 2005)

Microfinance expanded enormously in 1990's. Policy makers, donors, practitioners and academics underline the role to microfinance as a powerful tool for poverty alleviator and economic development. Few economic agendas are as popular these days as microfinance, rural finance and microcredit. Subject through the world Bank –base consultative group to assist the

poor(CGAP) a consortium of international donors and other agencies like the Women's institutions on microfinance theory and practice (Degefe Duressa, 2009).

According to “microfinance Barometer” (2017), in the year 2016 there were 123 million customers at microfinance institution worldwide for a loan of \$ 102 billion. India was the leader in terms of microfinance in 2016, with 47 million borrowers and roughly \$ 15 billion in outstanding loans. Vietnam was second, followed by Bangladesh, Peru and Mexico. The ranking shows strong momentum in South Asia. The region accounts for roughly 60 % of all borrowers and has the highest growth in terms of loans, up to 23.5% in 2016. Latin America and the Caribbean are also highly active in microfinance, with \$ 42.5 billion in outstanding loans, compared with \$9.3 billion in Europe and \$8.7 billion in Sub-Saharan Africa. Most borrowers were women in living in rural areas. They made up 84 % of borrowers in 2016, with people in rural areas representing roughly 60 % of the market.

2.2.3. Two schools of thought in microfinance

Microfinance brings the development sector and business sector together around the goal of providing credit to millions of poor people who do not have accesses formal credit institutions. These two sectors are represented in the two main schools of thoughts in microfinance; one that favors serving the poorest of the poor and one that favors sustainability (Mohan, 2005). These goals are not mutually exclusive, but complementary to one another.

1. Pro-poor school of thought

The primary goal of the pro-poor school is to serve the poorest of the poor. These organizations look to microfinance as means to break the cycle of poverty and work with people to build stronger livelihoods. It can be riskier and more expensive to serve this group. The poverty camp is housed within the development sector. Non-profits and NGOs servicing this segment of the population often rely on grants and donor funding to sustain their programs. Those in the pro-poor camp feel that unless they focus on the poorest of the poor, this group will not realize the benefit of microfinance.

2. Sustainable school of thought

The primary goal of sustainability school is to grow in scale and be financially self-sustaining, providing loan without grants or donor funding. The sustainability camp views the private sector with socially conscious for profit organization as the future home of microfinance. These organizations look to sustainability and efficiency to provide loans on a larger scale. However, self-sustainability is difficult, and many organizations seeking this as their primary goal will have to make difficult decisions. More stringent collateral requirements and practical favoritism to larger loans may lead sustainability-bound organizations away from serving the poor clients that they originally served. Both development and sustainability are two sides of the same coin and are most important two pillars of microfinance.

2.2.4. Benefits of microfinance in developing countries

According to (Ayres, 2019) the benefits of microfinance in the developing countries were discussed as follows;

1. It allows people to better provide for their families

Microfinance allows for an added level of resiliency in the developing world. Even when households are able to work their way out of poverty, it often takes just one adverse event to send them right back into it. It's often a health care issue that causes a return to poverty. By allowing entrepreneurs to become more resilient through their own effort at their own business, it gives them the opportunity to make it through times of economic difficulty.

Most of the households that take advantage of the microfinance offer that are available in developing countries live in what would be considered "abject poverty". This is defined as on \$ 1.25 per day or less- though some definitions extend this amount to \$ 2 per day or more. About 80% of that amount goes to the purchase or creation of food resources. By offering microfinance products that can be repaid with that remaining 20 %, more households have the opportunity to expand their current opportunities so that more income accumulation may occur.

2. It gives people access to credit

Muhammad Yunus, who is often credited as the modern father of microfinance, once gave \$27 to women out of his own pocket because he saw how the cycle of debt affect their work crafting bamboo chairs. Most banks will not extend loans to someone without credit or collateral because of the risks involved in doing so, yet those in poverty do not have any credit or collateral. By extending microfinance opportunities, people have access to small amount of credit, which can then stop poverty at a rapid pace. Yunus has always believed that credit is a fundamental human right. There are certainly some financial institutions which may disagree with his assessment. Yet without credit, it can be difficult, if not impossible for someone in poverty, to pursue an idea that could bring about a giant payday one day. Microfinance makes that pursuit possible.

3. It serves those who are often overlooked in society

In many developing nations, the primary recipient of microloans tends to be women. Up to 95 % of some loan products are extended by microfinance institutions are given to women. Those with disabilities, those who are unemployed, and even those who simply beg to meet their basic needs are also recipients of microfinance products that can help them take control of their own lives.

Women are key figures leadership roles in business, even in the developed world. Catalyst has reported that companies with female board directors are able to obtain returns that are up to 66 % better in returns in invested capital and 42% better in terms of sales returns than companies with male board members only. Women also develop others more frequently when it comes to entrepreneurial roles. This comes from coaching, feedback, or investments. Even in the developed world, women helping women is an economic force that poverty can't stop.

4. It offers a better overall loan repayment rate than traditional banking products

When people are empowered, they are more likely to avoid defaulting on a loan. Women are also statistically more likely to repay a loan than men, which is another reason, why women are targeted in the microfinance world. There's also the fact that for many who receive a microloan, it is their only real chance to get themselves out of poverty, so they're not going to mess things up. Zenger Folkman published a survey regarding ratings of high integrity and honesty in leadership roles that was separated by gender. The mean percentile of women displaying these

traits was 55%, while for men, it was just 48 %. In business, the bottom line is this: integrity matters. Microfinance institutions have recognized this and approached women because of this.

As a side effect of this approach, many developing countries are taking a new look at what roles women should play in society. Instead of treating a women as a second-class citizen, or the "barefoot in the kitchen and pregnant" attitude that has been prevalent in the past, the success of women in bring their households out of poverty is evidence that proves women not only have an initiative to get things done, but they produce consistent results.

For these reasons, microfinance institutions see total repayment rates of higher than 98% though there can be several accounts that are overdue at any given time.

5. It provides families with an opportunity to provide an education to their children

Children who are living in poverty are more likely to have missed school days or not even enrolled in school at all. This is because the majority of families who live in poverty are working in the agricultural sector. The families need the children to be working and productive so their financial needs can be met. By receiving micro financing products, there is less of a threat of going without funding, and that means more opportunities for children to stay in school.

This is especially important for families with girls. When girls receive just 8 years of a formal education, they are four times less likely to become married young. They are less likely to have a teen pregnancy. In return, this makes girls more likely to finish schooling and then either obtain a fair-paying job or go onto a further educational opportunity.

6. It creates the possibility of future investments

The problem with poverty is that it is a cycle that perpetuates itself. When there is lack of money, there is a lack of food. When there is a lack of clean water there is a lack of sanitary living condition. When people are suffering from malnutrition, they are less likely to work. A lack of sanitary creates the potential of illness that prevents working days.

Microfinance changes this by making more money available. When basic needs are met, families can then invest into better wells, better sanitation, and afford the time it may take to access the health care they need. As these basic needs are met, it also means that there are fewer

interruptions to the routine. People can stay more productive. Kids can stay in school more consistently. Better health care can be obtained. This creates a lower average family size because there are more guarantees of survival in place. And when that happens, the possibilities of future investments will occur because there is more confidence in being able to meet basic needs.

7. It is a sustainable process

How much risk is there with a \$100 loan? Some investors might pay that for a decent dinner somewhere. Yet \$100 could be enough for an entrepreneur in a developing country to pull themselves out of poverty. This small level of working capital is sustainable because it's essentially a forgettable amount. If there is a default on that money, the interest and high repayment rates of other microloans will make up for it. Then repayments are reinvested into communities so that the benefits of microfinance can be continually enhanced. Each repayment becomes the foundation of another potential loan.

This is why many microfinance products have relatively high interest rates. Some institutions may charge the equivalent of a 20% APR, but others have interest rates which exceed 80%. Although interest is high, recipients are invested into making these products work because virtually all institutions put repayments back into new loans that target the most vulnerable households in the developing world.

8. It can create real jobs

Microfinance is also able to let entrepreneurs in developing countries be able to create new employment opportunities for others. With more people able to work and earn an income, rest of the local economy also benefits because there are revenues available to more through local businesses and service providers. It's not just the entrepreneurial level that benefits from job creation through microfinance. Grameen Bank in Bangladesh employs over 21,000 people and their primary financial products are related to microfinance. That's tens of thousands of jobs that are created by the industry with the sole purpose of being able to drag people up and out of poverty.

9. It encourages people to save

When people have their basic needs met, the natural inclination is for them to save the leftover earnings for a future emergency. These create the potential for more investments and ultimately even more income for those who are in the developing world. Some microfinance institutions have seen an extraordinary number of savings occur when products are extended. The unit Desai of Bank Rakyat Indonesia counts 28 million savers to just 3 million microloan borrowers.

Now saving isn't always seen, especially from borrowers, but this is part of the expected microfinance process. Small loans make small financial improvements for households living in poverty. The difference between making \$ 1.90 per day and \$ 2.30 per day is not much in reality, but by definition, that amount takes someone out of extreme poverty. Instead of big improvements, microfinance allows for small improvements. When enough of those improvements occur, then there is a safe place for people to store their income thanks to this industry.

10. It reduces stress

There is a valid argument to be made that some microloans go to cover household expenses instead of business needs. Some are using these loans to pay bills or purchase food. It is true. Yet without this product available, there wouldn't be an ability to pay bills or purchase food. So even though it may not always be used for business purposes, it still serves a purpose by reducing stress. Stress cannot be underestimated when it comes to poverty. Even in the developing world stresses of poverty can be overwhelming. It causes people to seek out coping mechanisms that are not always healthy. And, in some cases, it may even cause families to break apart.

Sometimes child birth is a coping mechanism for poverty simply because an extra set of hands means an extra chance for income. By reducing these stress makers, households can focus on the job at hand to provide for themselves, even if that means net income levels for that family may not rise in the near future.

11. It allows people to feel like they matter

The feeling of receiving a credit product for the first time cannot be ignored. It's a feeling like you've made it. That you really are somebody because, you've been trusted with credit. This feeling applies to everyone, even in the developed world. Instead of focusing on how they can just survive, then being to look for ways to thrive. This brings us back to the stress that poverty creates on people. People, when they are approved for a microloan for the first time, will often have a reaction that is similar to Steve Martin's reaction in the jerk when he discovered his name in the phone book. And this is why Yunus feels that credit is a fundamental right. Without credit, survival is often best possible outcome. With credit, there is hope that anything can be possible.

12. It offers significant economic gains even if income levels remain the same

The gain from participation in a microfinance program including access to better nutrition, higher levels of consumption, and consumption is smoothing. There is also an immeasurable effect, which occurs when women are empowered to do something in their society when they might not normally be allowed to do so. As spending occurs, these benefits also extend outward to those who may not be participating in the program so that the entire community benefits.

The most important weakness of microfinance is that the effects of raising income levels for the poor can often be questionable. Although it raises the possibility of income accumulation and savings, microfinance products also raise the possibility of creating a further indebtedness that may potentially extend the cycles of poverty for an infinite period of time.

Although some may look at consumption in a negative view, those who have gone without for long will see improved consumption as a sign that things are getting better. Consumption smoothing allows an entire community to realize the benefits that microfinance can provide. It isn't always about the money. Sometimes economic success comes from stability. Yet if you were to ask the average person who was the recipient of a microloan how they fit the experience, you would be told that they were happy the loan was available. This happiness is reflected in the high repayment rates that are almost always seen in programs offered within developing countries. That in itself shows that the benefits of microfinance at a core level are almost leaving a positive effect.

2.2.5. Key principles of microfinance

1. The poor need a variety of financial services, not just loans

Just like everyone else, poor people need a wide range of financial services that are convenient, flexible and reasonable priced. Depending on their circumstances, poor people need not only credit, but also savings, cash transfers and insurances.

2. Microfinance is a powerful instrument against poverty

Access to sustainable financial services enables the poor to increase incomes, build assets, and reduce vulnerability to external shocks. Microfinance allows poor households to move from everyday survival to planning for the future, investing in better nutrition, improved living conditions, and children's health and education.

3. Microfinance means building financial system that serves the poor

Poor people constitute the vast majority of the population in most developing countries. Yet, an overwhelming member of the poor continues to lack access to basic financial services. In many countries, microfinance continues to be seen as a marginal sector and primarily a development concern for donors, governments and socially responsible investors. In order to achieve its full potential of reaching a large number of the poor, microfinance should become an integral part of the financial sector.

4. Financial sustainability is necessary to reach significant numbers of the poor people

Most poor people are not able to access financial services because of the lack of strong reliable financial intermediaries. Building financially sustainable institutions is not an end in itself. It is the only way to reach significant scale and impact far beyond what donor agencies can fund.

Sustainability is the ability of a microfinance provider to cover all of its costs. It allows the continued operation of microfinance provider and the ongoing provision of financial services to the poor. Achieving financial sustainability means reducing transaction costs, offering better products and services that meet client needs and funding new way to reach the unbanked poor.

5. Microfinance is about building permanent local financial institution

Building financial systems for the poor means, it is building sound domestic financial intermediaries that can provide financial services to the poor people on a permanent basis. Such institutions should be able to mobilize and recycle domestic savings, extended credit, and provide a range of services. Dependence on funding from donors and governments including government financial development banks will gradually diminish as local financial institutions and private capital markets mature.

6. Microcredit is not always the answer

Microcredit is not appropriate for everyone or every situation. The destitute and hungry that have no income or means of repayment need other forms of support before they can make use of loans. In many cases, small grants, infrastructure improvements, employment and training programs, and other non-financial services may be more appropriate tools for poverty alleviation. Wherever possible, such non-financial services should be coupled with building savings.

7. Interest rate ceilings can damage poor people's access to financial services

It costs much more to make many small loans than a few large loans. Unless micro lenders can charge interest rates that are well above average bank loan rates, they cannot cover their costs, and their growth and sustainability will be limited by the scarce and uncertain supply of subsidized funding. When governments regulate interest rates they usually set them at levels too low to permit sustainable microcredit. At the same time micro lenders should not pass on operational inefficiencies to clients in the form of prices (interest rates and fees) that are far higher than they need to be.

8. The government's role is as an enabler not as a direct provider of financial services

National governments play an important role in setting a supportive policy environment that stimulates the development of financial services while protecting poor people's savings. The key things that a government can do for microfinance are to maintain macroeconomic stability, avoid interest-rates caps, and refrain from distorting the market with unsustainable subsidized, high-delinquently loan programs. Governments can also support financial services for the poor by improving the business environment for entrepreneurs, clamping down on corruption, and

improving access to markets and infrastructure. In special situation, government funding for sound and independent microfinance institutions may be warranted when other funds are lacking.

9. Donor subsidies should complement, not compete with private sector capital

Donors should use appropriate grant, loan and equity instruments, on a temporary basis to build the institutional capacity of providers, develop supporting infrastructure (like rating agencies, credit bureaus, audit capacity etc.) and support donor subsidies may be required to sparsely populate and otherwise difficult-to-reach populations. To be effective, donor funding must seek to integrate financial services for the poor into local financial market: apply specialist expertise to the design and implementation of projects require that financial services for the poor into local financial markets, apply specialist expertise to the design and implementation of projects: require that financial institutions and other partners meet minimum performance standards as a condition for continued support: and plan for exit from the outset.

10. The lack of institutional and human capacity is the key constraints

Microfinance is a specialized field that combines banking with social goals, and capacity needs to be built at all levels, from financial institutions through the regulatory and supervisory bodies and information systems, to government development entities and donor agencies. Most investments in the sector, both public and private, should focus on this capacity building.

11. The importance of financial and outreach transparency

Accurate, standardized, and comparable information on the financial and social performance of financial institutions providing services to the poor is imperative. Bank supervisors and regulators, donors, investors, and more importantly, the poor who are clients of microfinance need this information to adequately assess risk and returns (CGAP, 2009).

2.2.6. Challenges faced by micro finance institutions

According to (Vilkar, 2016), the following challenges face by microfinance institutions:

- Cost of outreach- reaching the unbanked populations of the world means servicing small loan amounts and servicing remote and sparsely populated areas of the planet, which can be dangerously unprofitable without high rates of process automation and mobile delivery.
- Lack of scalability- smaller microfinance systems often struggle to preserve the profitability and performance in these markets, as financial institutions experience high growth rates that result from getting the service delivery right. This results in thwarting the growth of these organizations.
- Quality of self-help groups- Due to the fast growth of self-help bank linkage program, the quality of MFIs has come under stress. This is due to various reasons such as:
 - The intrusive involvement of government departments in promoting groups,
 - Diminishing skill sets on part of the MFIs members in managing their groups,
 - Changing group dynamics.
- Geographic factors- most MFIs agree that the geographic factors make it difficult to communicate with clients of far areas which create a problem in growth and expansion of the organization.
- Diverse business models- supporting the very wide range of features and lending activities is difficult and requires a considerable amount of cost and efforts.
- High transaction cost- High transaction cost is a big challenge for microfinance institutions. The volume of transactions is very small, whereas the fixed cost of those transactions is very high.
- Limited budgets- Making provisions for large upfront investments is not possible. Most of the MFIs which link their capability to purchase world class banking solutions that can help them fulfill their requirements and support their growth targets.

2.2.7. Criticisms of microfinance

Some researchers criticized on the reality made in microfinance institutions.

Different researcher discussed some promises and the problems in the field of microfinance and criticized some problems they discovered during their field studies (Rodrigo, Karlan, & Sheldon, 2013):

- Despite the fact that most of the world's poor are in rural areas, most microfinance has been focused on urban areas. The types of lending and savings models that are needed in rural are very different.
- Some of the money loaned was invested in existing business and not to those who seek to begin new ones.
- They also criticized that increase from the business established by borrowing from microfinance institutions has been benefited only for men and not for women.

2.2.8. Performance Measurements of microfinance

The performance and achievements of MFIs are tested by some performance metrics. (Yirsaw, 2008), by citing SEEP network and CGAP identified most widely used evaluation of financial and operational performance in terms of:

1. Sustainability and profitability

Tend to summarize performance in all areas of the company and its sustainability. Most widely indicators of sustainability and profitability includes: Adjusted return on assets, operational self -sufficiency.

2. Asset/Liability management

This includes performance indicators like: portfolio to assets, adjusted costs of funds ration, adjusted debt to equity and liquidity ratio.

3. Portfolio quality

The most widely used measure of portfolio quality in the microfinance industry includes: portfolio at risk, write off ratio, risk and coverage ratio.

4. Efficiency/productivity

Efficiency and productivity indicators are performance measures that show how well the institution is streamlining its operations. Productivity indicators reflect the amount of output per unit of input. These indicators reflect how efficiently a MFI is using its resources, particularly its assets and its personnel. The most common efficiency and productivity indicators include: personnel productivity, average outstanding loan size, operating expense ratio & cost per borrower.

In microfinance research, social performance is related to the social mission of MFIs, i.e. reaching out to the poor by lending to individual households and small firms having limited or no access to finance. Studies on the social performance of MFIs mostly focus on two dimensions of outreach, that is, its breadth and depth.

The breadth of outreach refers to the coverage of MFI and is generally measured by the number of clients served by the MFI. The depth of outreach refers to the type or profile of the clients served by the MFI. The two most widely used measures of the depth of outreach are the ratio of active female borrowers to the total number active borrowers of MFI and the average size of the loan divided by the GDP per capita of the country in which the MFI resides. The intuition behind the first measure is that female borrowers are generally considered as being among the poorest of the population and that they are most strongly excluded from taking out loans from formal banks. The second measure is a proxy of the average poverty level of clients taking out a loan from the MFI. The poor are expected to take out smaller loans (relative to their income). MFIs may also not be willing to lend larger sums to poorer clients because of the potential risk of non-repayment. Sometimes, measures related to outstanding (number and size) of deposit accounts are used. However, not all MFIs are offering deposit accounts due to regulatory barriers, meaning that the coverage of studies using these measures is generally lower. A minority of studies also use an indicator of the geographical dimension of outreach by taking the percentage of clients living in rural area. The assumption supporting this measure is that the majority of the poor usually live in rural areas (Hermes & Hundon, 2018).

2.2.9. Difference between microfinance and traditional banking services

Many microfinance institutions operate very similarly to commercial banks. They are started with equity capital; they borrow debt typically from banks, depositors and aid organizations.

They lend as much as they can for the best terms possible (amount, interest rate, payback schedule) without a) being beyond the risk threshold set by some combination of their board of directors, management, and lenders b) violating local banking regulations. Operationally, they have branch offices with credit officers who have relationships with community members and discuss the MFI's loan products with them, also retrieving interest and principal repayments if borrowers must in cash and lack the means to bring it to branch offices.

Non-profit MFIs exist, but they grow to be exception rather than the norm, many MFIs started as non-profit have converted to for profits.

The CEOs and CFOs of large MFIs are not that different in mindset than managers at similarly sized banks. Below are factors differentiating MFIs from traditional commercial banks. Points C and D specifically can make MFIs more lucrative than traditional banks.

- A) Target market: MFIs focus on lending to unbanked low-income families. This doesn't make them more charitable though since they are charging these families' higher interest rates than comparable people in those communities with higher income and/or securable assets (houses, motorbikes, etc.). Also, assets aside lower income borrowers are not necessarily much riskier for loans proportionally sized to their incomes as long as they have steady incomes. Frequently loans also increase family income (i.e. when they used to buy inventory for a store or seed so they can participate in the next harvest). MFI borrowers can be just as likely as their richer community members to be diligent workers perhaps with small businesses (road side restaurants or stands, farms etc.) or secure jobs (in agriculture, retail, garment manufacturing, etc.) and they could have just as much drive to find new jobs as if they lose their current jobs. They could be just as motivated to improve opportunities for their families and maintain reputation as honest, upstanding community members.
- B) No collateral: Where as traditional bank lending is often secured by assets (house, motorbikes etc.), microfinance lending tends to be unsecured. Thus, the MFI does not take the borrower's assets if he/she fails to return the loan.
- C) Greater leverage than traditional banks.
- D) Lower costs of capital relative to risks.

E) Group lending: some MFIs offer group lending product. For example, a 10 person group of community members may borrow individual loans and guarantee each other's. Thus, they are reflectively borrowing the loans together since if one person cannot pay back his or her loan, the others have to pay it back or they all risk defaulting and never borrowing from the MFI again. The benefits of this model are social pressure and communal assistance, but it has been phasing out because in many cases the operating costs associated with its implementation make it less profitable than individual loans.

2.2.10. Determinants of performance of MFIs

MFIs performance can be affected by various determining factors. Empirical literatures in relation to determinants of MFIs performance are very limited. Most of previous studies done in this area are depended upon the theory of banking financial performance by assuming that MFIs also provide banking service to the poor (Yenesew, 2014). These empirical studies divide performance determinants into two main categories, namely internal determinants and external determinants.

2.2.10.1. Internal determinants

Internal determinants of MFIs are those which are controllable by management.

a) Portfolio quality

According to (CGAP, 2009), portfolio quality (loan repayment) is the most revealing of performance areas.

A retail lender's ability to collect loans is critical for its success if delinquency is not kept to very low levels, it can quickly spin out of control. Furthermore, loan collection has provided to a strong proxy for general management competence. The standard international measure of portfolio in banking is portfolio at risk (PAR) beyond a specified number of days:

$$\text{PAR (x days)} = \frac{\textit{outstanding principal of all loans past due more than x days}}{\textit{outstanding principal balance of all loans}}$$

The number of days (x) used for this measurement varies. In microfinance, 30 days is a common break point.

b) Capital to asset ratio

Capital to asset ratio is a simple measure of solvency of MFIs. This ratio helps and MFIs assess its ability to meet its obligations and absorb unexpected loss.

The determination of an acceptable capital to asset ratio level is generally based on MFIs accounting policies through provisioning by the MFI's accounting policies, which removes expected losses from both assets and equity. Thus, the ratio measures the amount of capital required to cover additional unexpected losses to ensure that the MFI is well capitalized for potential shocks (Yenesew, 2014).

c) Operational Efficiency

It is a performance measure that shows how well MFI is doing its operations and takes into account the cost of the input and/or the price of output. They are recommended to measure whether a retail microfinance provider is cost effective. The most commonly used indicator of efficiency expresses nonfinancial expenses as a percentage of the gross loan portfolio:

$$\text{Operating expense ratio (OER)} = \frac{\textit{personnel and administrative expense}}{\textit{Period average gross loan portfolio}}$$

It allows a quick comparison between a MFI's portfolio yields with its personnel and administrative expenses how much it earns on loans versus how much it spends to make them and monitor them (CGAP, 2009).

d) Gearing Ratio/ Debt to Equity Ratio

The debt to equity ratio is calculated by dividing total liability by total equity. Total debt includes everything the MFI owes to others, including deposit, borrowings, account payable and other liability accounts. The debt/equity ratio is the simplest and best known measure of capital adequacy because it measures the overall leverage of the MFIs.

e) Size of microfinance (Total Asset)

The Size of a MFI is measured by value of its assets (Hermes & Hundon, 2018). Large firms have the advantage due to the size of operations, large firms have the advantage of getting the

access to credit finance for investment, possess a larger pool of qualified human capital and have a greater choice for strategic diversification compared to small firms.

f) Age of MFIs

There is a thought that as MFIs mature, and acquire experience, they increase their livelihood of allowing financial sustainability. This can be explained by the fact MFIs gradually control over their all operations related to issuance of microcredit. In other cases, MFIs that have considerable experience in microfinance sector have diligently applied credit risk management and general efficient management techniques to attain financial sustainability (Ayayi, 2010).

2.2.10.2. External Factors

Some research papers undertaken on performance of MFIs, mentioned real GDP, market concentration and others as external determinants of performance of MFIs.

a) Real GDP

According to (Yenesew, 2014), Real GDP is a variable which is expected to exhibit positive relationship with MFIs profitability. It is the most informative single indicator of progress in economic development. Poor economic conditions can worsen the quality of loan portfolio, thereby reducing profitability. In contrast, an improvement in economic conditions, have positive effect on the profitability of MFIs.

b) Market concentration

(Molyneux P. &., 1992), in their study tried to conclude market concentration shows a positive statistically significant correlation with pre-tax return on assets which is a consistence with the traditional structure conduct –performance paradigm.

2.3 Empirical Literature review

The research studies made on performance of microfinance institutions are increasing from time to time both in Ethiopia and in the globe. Below are some of the summaries of previous empirical studies by different scholars in various countries.

(Waithaka, 2013), made a study on factors that influence the social performance of microfinance institutions in Kenya. The analysis was made by using various statistical tools to make tests like validity, reliability, and factor analysis and normality test for dependent variable. The overall objective was to establish factors that influence the social performance of MFIs in Kenya. The result was the leadership characteristics, involvement of stakeholders in MFIs, size of MFIs, age of MFIs have impact on performance of MFIs.

(Hermes & Hundon, 2018), in their research on “determinants of microfinance institutions”, made a systematic review on determinants of financial and social performance of MFIs, by using secondary data. The majority of their study was based on quantitative methods to analyze the performance of microfinance institutions. Their result was maturity; size and type of organization, funding sources available, governance structure, conditions external to MFIs etc. have positive and negative influence on performance of MFIs.

(Hassan & Abdullah, 2018), studied the factors influence growth and penetration of microfinance, institutions, a case of Egypt. They used descriptive research design to effectively address the research objective. They conducted structured interviews with some selected respondents by face to face and telephone. Their variables were: interest rate, politics and economics, corruption, customer outreach, competition and technology. The findings were that lack of use of technology and customer outreaches are main hindrances for growth and penetration of MFIs in Egypt.

(Almas & Mukhtar, 2015), tried to measure the performance and achievement of MFIs incorporating using data collected from financial statements of microfinance institutions. Subsidy, dependence index and outreach index in Pakistan. They tried to compare subsidy dependence and financially self-sufficiency index using data from the years of 2006 to 2012. Their study revealed that some MFIs in Pakistan are subsidy in terms of FSS. They recommended that MFIs should struggle to reduce operational costs; otherwise they would not reach their clients in far off places.

(Yirsaw, 2008), in his case study on the performance of six microfinance institutions in Ethiopia, tried to assess the financial and operational performance of microfinance institutions. He used mainly secondary data of selected microfinances such as income statement and balance sheet.

The data were analyzed by using different statistical tools like mean and ratio analysis to address the scientific evidence in financial and operational performance of MFI's. Five years data from 2002 to 2006 were used to the trend in performance. He found that an increase in portfolio to assets ratio over years for medium and large MFIs, and cost of fund was high in 2005 in the institutions. But liquidity was not major problem for small MFI compared to medium and large ones.

(Yeshe, 2015), in his thesis study entitled “the relationship between outreach and financial sustainability: An empirical study on Ethiopian microfinance institutions”, examined the influence of loan outreach and financial sustainability in Ethiopia by using diagnostic tests, descriptive statistics dependent and independent variables, multiple regression and correlation matrix. The studies found out MFIs in Ethiopia were operationally sustainable as measured by self-sufficiency. But after subsidy adjustments MFIs are not financially sustainable as measured by self-sufficiency ratio. The relationship between outreach and financial sustainability depends on the variable used in the regression models.

(Abdi & Batra, 2018), made research on performance analysis of MFIs in Ethiopia. Their study methodologies were secondary data of 31 MIF's for the period of 2010-2016 collected from the NBE, journals AEMFI and the primary data were collected using questioners. The data have been descriptive statistics and financial ratios to measure the performance of MFI's in the country. In general, the study result shows that the Ethiopian MFIs are serving clients which are not poor and this leads to that their performance can be said poor.

(Ayele, 2015), in his study of MFIs in Ethiopia, Kenya and Uganda: Loan outreach to the poor and the quest for financial viability, by analyzing panel data set of 31 microfinance data sets of (2003-2012) drawn from the three countries found that compared to banks, MFIs are less efficient and they often charge higher interest rate on loans and have a shorter repayment schedule.

(Chala & Semeneh, 2016), in their research entitled “Factors affecting performance of microfinance institutions in Bale Zone, Oromia region”, used primary data of 389 household heads through structured and unstructured interviews and collected secondary data from three years (2005 to 2007) annual reports of selected MFI. The study used both quantitative and

qualitative methods of data analysis. Their research study result revealed that lack of experience of employees, inadequate trained manpower and lack of efficient system to enforce contract as the main factors influencing the performance of MFIs in the study area.

2.4. Research Gap

Even though, the above mentioned empirical reviews tried to point out their finding as per their study area, it doesn't necessarily mean that these findings apply for all microfinance institutions. In addition, some of the MFIs' studies do not show recent status of performance. Furthermore, others conducted their studies by using only one institution's data to determine MFIs' performance. This may lack sufficient information.

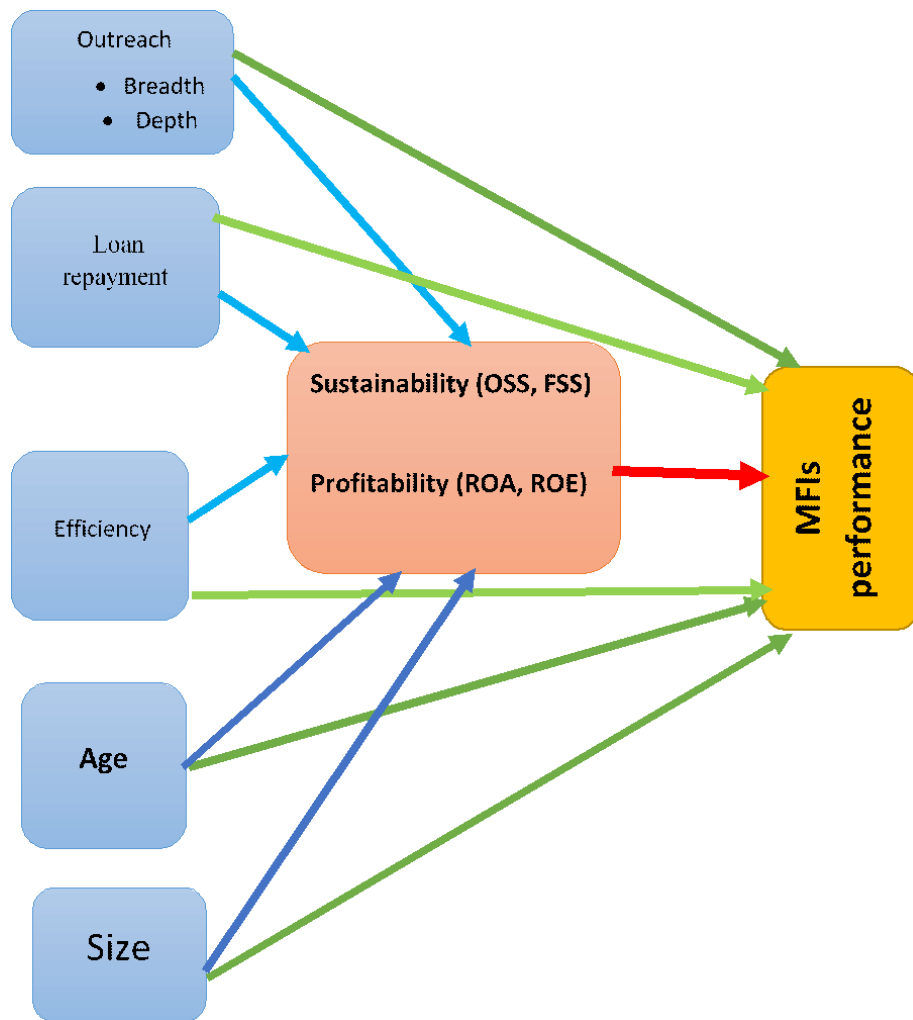
Thus, this study has focused on filling those research gaps by assessing the outreach in terms of the breadth and depth through its client poverty level, loan repayment through portfolio at risk, financial sustainability (FSS, OSS) and financial profitability through (ROA, ROE) and efficiency by operating expense ratio (OER) of the performance of MFIs in Ethiopia with help of recent panel data of nine years' of twenty seven MIFs. This research also analyzed the effect of predictor variables such as outreach, loan repayment, efficiency, age and size of the microfinance sustainability that in turns has an effect on the performance of microfinance institutions in Ethiopia. It has tried to show the current status whether the microfinance industries in Ethiopia are financially and operationally sound or not.

2.5. Conceptual framework

This conceptual framework indicated that there is the relationship between the dependent variables which is performance of the microfinance and the independent variables such as outreach, loan repayment, efficiency, age and size of the microfinance institutions in Ethiopia.

Different empirical evidences identified that financial performance of MFIs is affected by internal and external factors. For example, (Yenesew, 2014) , identified that age, portfolio quality, total asset, GDP and market concentration affect financial performance of MFIs.

(Hassen & Alemu, 2018), revealed that outreach of MFIs and efficiency have positive relation with financial performance of MFIs in Ethiopia.



Source: developed by self-design, 2019

Figure 1: Conceptual framework of Dependent and independent variables

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

This chapter dealt with overall research design and methodology. It includes research design, population, sample size, methods of data collection, data analysis and techniques, variable description and model specification.

3.1 Research Methodology

Descriptive statistics particularly percentage and multiple regression models have been used to assess the significant performance of microfinance institutions on sustainability and profitability as well as the overall performance status of MFIs in Ethiopian. To measure the financial sustainability of microfinance institutions in Ethiopia, Operational Self-Sufficiency and Financial Self-Sufficiency ratios were applied and to measure profitability return on equity and return on asset were applied as the dependent variables. Therefore, to measure the predictor variables of operational self-sufficiency, financial self-sufficiency, return on equity and return on asset six measures namely outstanding loan, saving balance, number of active borrowers, depth of outreach, operating expense ratio and portfolio quality were used as independent variables. In addition to this age and size of MFIs were also considered to assess their performance. More over based on the category made by NBE, the relative performance of each category was analyzed.

According to (Gujarati, 2004), using panel research methodology or longitudinal research methodology has advantages like-the techniques of panel data estimation can take heterogeneity explicitly into account by allowing for individual-specific variables. By using combining time series and cross-section observations, panel data give more informative data, more variability, less freedom and more efficiency. “By standing the repeated cross-section of observations, panel data are better suited to study the dynamics change, panel data better detect and measure effects that simply cannot be observed in pure cross-section or pure time series data, by making available for several thousand units, panel data can minimize the bias that might result if we aggregate individuals or firms into broad aggregated. They will employ quantitative research as the literature on the research methodology shows quantitative research approach tends to assume

that there is a cause and effect relationship between known variables of interest. Thus, quantitative research methodology is applied in this research paper.

3.2. Research design

This research is a quantitative in its nature in which the research design used is the longitudinal design. The type of longitudinal design that has been used, in this research, is the panel one. The advantages of using longitudinal research design are threefold; first it reveals individual level changes, second, establishes time order of variables, and third it can show how relationship emerges between variables. Therefore to ensure the evidence obtained enable the researcher to answer the initial questions, the type of data needed has been used for nine consecutive years (2010- 2018).

3.3. Research method

3.3.1. Source of data

The data used for this study is purely secondary data that taken from the national bank of Ethiopia. Although, there are 38 MFIs in Ethiopia, only 27 audited MFIs were considered in this research study in order to get the reliable and valid data. Accordingly, financial data for twenty seven MFIs for the period of 2010-2018 were collected from the NBE.

3.3.2. Data gathering tools

As data gathering tools for this research study, the financial document review of 27 audited MFIs regarding status of outreach, loan repayment, and financial sustainability and measuring efficiency of MFIs was assessed. The documents are authoritative and acceptable for the research purpose, because, in one hand, it is audited and in other hand, it was collected from legitimate organization.

3.3.3. Target Population

The target populations for this particular study are all audited microfinance institutions currently operating in the country. According to the statistics from the NBE, there are 38 microfinance

institutions which are providing a microfinance service to the poor society in Ethiopia on the current period; however, there are 27 audited MFIs.

3.3.4. Sampling technique and sample size

Sampling is the part of statistical practice concerned the selection of an unbiased or random subset of individual observations within a population of individuals intended to yield some knowledge about the population of concern, especially for the purpose of making predictions based on statistical inference, or sampling is the process of selecting a few or sample from the large group or sampling population in order to estimate about the prevalence of unknown piece of idea in the study population (Gebrehiwot, 2016).

To overcome the problem of bias, the researcher has selected the microfinance institutions based on whether the MFIs are audited or not in the year 2010-2018. Thus, from the total population of all the microfinance institutions in Ethiopia, sample size of this study was 27 microfinances, which is 71% (27/38) of the total MFIs based on the availability of the audited financial data.

3.3.5. Data analysis techniques

The financial data of selected MFIs for the period of nine years (2010-2018) had been collected from NBE, and analyzed by using ratios, and percentage. The panel data of the study have been analyzed using descriptive statistics and financial ratios to measure the performance of MFIs in Ethiopia using performance indicators suggested by Richard Rosenberg (2009) and other widely used MFIs performance measure such as outreach, loan repayment, financial sustainability, efficiency and financial management. Peer category classification has been made by which MFIs had been classified into three groups for the analysis based on their maturity, breadth outreach, age and operation scale. This peer category classification of MFIs has been considered as important facts by which MFIs performance has a meaning when it composed with MFIs that are found in the country to understand their achievement (Amaha & Kifile, 2016).

3.4. Description of Variables

As shown in the literature review, the financial performance of microfinance institutions selected has been measured using different performance indicators that show how far they achieved their

financial and social goals. This section explains the variables that have been used as dependent and independent (explanatory) variables in this study.

3.4.1. Dependent variable

The dependent variable is the financial performance of microfinance institutions in Ethiopia.

3.4.2. Independent variables

All of the following financial performance indicators independent variables are defined according to (CGAP, 2009):

1. **Outreach: Breadth (Number of clients served):** Includes borrowers, depositors and other clients who are currently assessing any financial services. This indicator is more useful than cumulative numbers make a MFI that offers short-term loans look better than one that provides longer term loans, even though the later may be more valuable for the borrowers. To reflect actual service delivery, membership based organizations should report on active clients net just the number of members: members' may be inactive for long periods, especially in financial cooperatives.
2. **Outreach: depth (client poverty level):-** refers to the poverty level of clients served. Many though not all, microfinance projects have poverty reduction as on explicit objective, and are thus expected to reach poor clients. For such projects, there are various techniques for measuring clients poverty levels, some quite expensive and others simpler, but yet there is widespread agreement one on anyone of them. If the project does not use a more sophisticated indicator, it should at a minimum report the following very rough proxy for the poverty level of loan or savings clients at a point in time.

$$\text{Average outstanding balance} = \frac{\text{Gross amount of loans or savings outstanding}}{\text{No of active clients or accounts}}$$

3. **Loan repayments (portfolio quality):-** Portfolio quality is a crucial area of performance indicator for the fact that the largest source of risk for any financial institutions resides in its loan portfolio. The loan portfolio quality affects a MFIs largest asset and the quality of that asset which poses risk on the institution is a serious issue. Especially, for MFIs, whose loan is typically not backed by bankable collateral the quality of the portfolio is absolutely

crucial. The standard international measure of portfolio quality is portfolio at risk (PAR) beyond a specified number of days.

$$\text{PAR (x days)} = \frac{\text{outstanding principal of all loans past due more than x days}}{\text{outstanding principal balance of all loans}}$$

Financial sustainability: The performance of MFIs was usually reviewed based on sufficient revenue ability from the loan portfolio of the MFIs to cover operational and financial cost such as ROA and ROE of the MFI that provide financial services in all the areas. Though MFIs profitability is affected by poor portfolio quality, indicators of MFIs profitability are difficult for interpretation as they are a complex managerial factor result (Amaha & Kifile, 2016).

4. **Efficiency:**-These ratios measure the costs of an MFI in relation to the outputs. It shows how proficient the organization and management is operating its financial activities, particularly its use of assets and human resources. It answers the question: Does my MFI serve as many clients as possible with its resources for the lowest possible cost? Two indications are recommended to whether a microfinance provider is cost effective. They do not include interest paid on MFIs liabilities or loan loss provision expenses.

$$\text{Operating expense ratio (OER)} = \frac{\text{Personnel \& administrative expense}}{\text{Period} - \text{average gross loan portfolio}}$$

5. Size of MFI (Total asset)

According to Hermes et.al (2008), the size of a microfinance institution is measured by its assets. The size of a firm has shown to have an impact on performance of MFIs due to advantages and disadvantages faced by the firms with a particular level of growth. He cited from Chandler (1962), that the size of firms has advantages on their performance. Large firms can operate at lower costs due to scale and economic advantage. Due to the size of operations, large firms have the advantage of getting the access to credit finance for investment, possess a larger pool of qualified human capital and have a greater chance for strategic diversification compared to small firms.

6. Age of a firm

Age refers to the period that an MFI has been in operation since its initial inception. There is thought that as MFIs get matured, thus acquire experience in their sector; they increase the

likelihood of attaining financial sustainability. This can be explained by the fact that MFIs gradually improve their control over all operations related to issuance of microcredit (Yenesew, 2014).

3.5. Ethical considerations

The research study has been adhered to ethical principles with respect of the data collection and use of it in the study. In the first place, all the ideas and concepts taken from other scholars that used for reviewing the literature are acknowledged. In addition the data obtained by recording or written notes will not be passed to third party at any circumstances and only used for the purpose of this research study.

3.6 Data Reliability and Validity

Reliability and validity research are central criterion and important issues in both quantitative and qualitative research. Validity refers to the strength of a research conclusions, inferences, or propositions (Tadesse, 2010).

Reliability estimates the constancy of the measurement or simply, the degree to which an instrument measures the same way each time it is used under the same conditions with the same subjects (Adams et.al. 2007). To insure the validity and reliability of this study, the researcher has provided sufficient information and reliable data. Moreover, as much as possible the researcher tried to get audited financial statements of the selected MFIs from NBE which is legally legitimate.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

As stated by National Bank of Ethiopia (NBE), there are 38 microfinance institutions registered to provide microfinance activities of saving, demand and time deposits, extending credits to rural and urban and people engaged in other similar activities, drawing and accepting drafts payable within Ethiopia, micro insurance businesses, purchasing income generating financial instruments such as treasury bills and other short term instruments, rendering managerial marketing, technical and administrative advice to customers, providing financial leasing services to peasant farmers, micro and small-scale urban and rural entrepreneurs and other similar services. To achieve these objectives MFIs should be viable and sustainable.

This chapter presents Analysis, interpretations and findings of data that discuss in view of empirical works and conceptual frame works. The findings stated below are extracted and analyzed from the financial statements of each microfinance institution under considerations. In order to increase the reliability of data, audited reports were used. This chapter presents findings of the study on outreach, loan repayment, financial sustainability, financial and operational efficiency, age and size of microfinance institutions.

4.1. Outreach indicators

Outreach is a very important indicator to understand the ability of microfinance institutions' to reach the poor society. MFIs' contribution in the overall poverty reduction can be seen from the perspective of the scope of outreach by measuring the no of poor clients they have reached. This regard, this section analyzes the No. of active borrowers being served by MFIs, the total volume and growth of outstanding loan, the size and growth trends of average loan size per borrower and deposit mobilization capacity and trends of MFIs selected for the study.

4.1.1. Breadth (number of clients served)

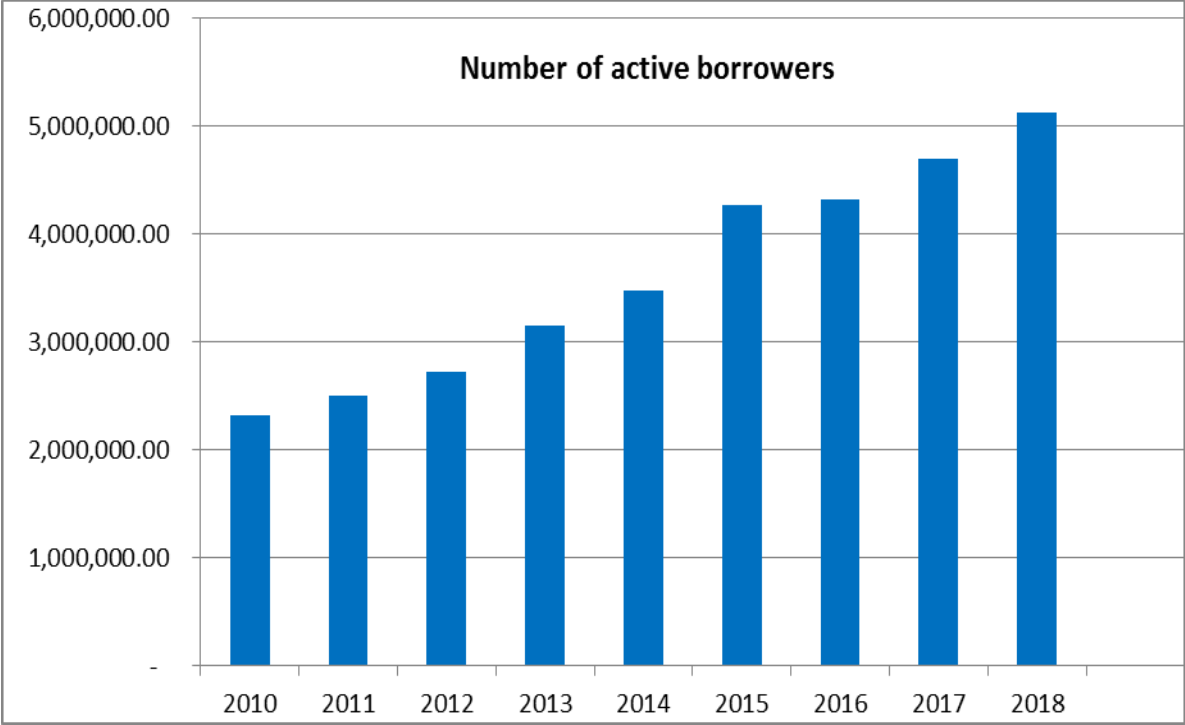
It is the number of clients that are active at a given point of time. This includes borrowers, deposits, and other clients who are currently accessing any financial services. The number of saving accounts of MFIs in Ethiopia is reaching to 17,719,292 as of June 2018.

Table 1: Outreach (breadth) trends in Ethiopia (2010-2018)

Year	Outstanding loan	% age change	Saving Balance	% age change	Active borrowers	% age change
2010	5,706,372,461		2,023,443,931	-	2,325,914	-
2011	7,157,811,931	25.44	3,711,987,024	83.45	2,502,773	7.60
2012	9,272,171,887	29.54	5,179,365,011	39.53	2,727,889	8.99
2013	12,893,173,319	39.05	7,519,026,335	45.17	3,157,423	15.75
2014	16,976,417,223	31.70	11,768,797,655	56.52	3,479,225	10.15
2015	21,342,818,400	25.72	14,432,836,700	26.05	4,270,887	22.75
2016	24,514,569,700	14.86	18,432,836,700	74.49	4,326,422	1.30
2017	31,423,192,900	28.18	26,323,963,400	42.81	4,695,393	8.53
2018	43,772,362,200	39.30	33,213,124,600	26.17	5,130,115	9.26

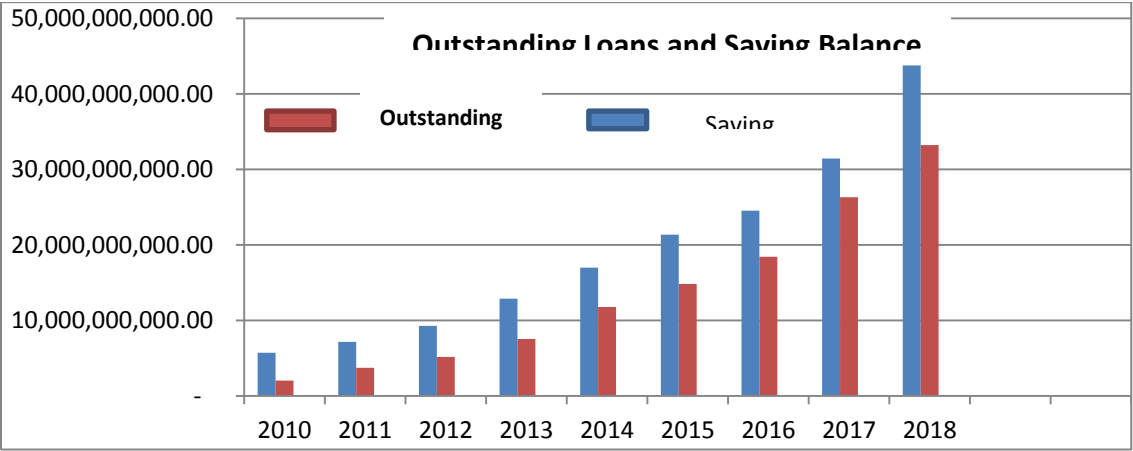
Source: Researcher's own computation from data of NBE (2019).

As it is shown in the above table, the growth pattern of outstanding loan is encouraging. But percentage changes of some years are decreasing.



Source: Researcher’s own construction based on data of NBE.

Figure 2: Number of active borrowers



Sources: Researchers own construction based on data of NBE (2019).

Figure 3: Outstanding loans and savings balance of 27 MFIs in Ethiopia (2010-2018).

As shown from the Table 1 and Figure 2 above, the outstanding loan increased from 5.7 billion in the year 2010 to 43.7 billion in the year 2018. This indicated that the outstanding loan remarkably increased consecutively. However, the pattern of increments of the outstanding loan is inconsistent from year to year. As it was shown on table 1 above, pattern of percentage change for the first three consecutive years (2010-2013) increased, whereas, there is a trend of decrement for the next three years (2014-2016), and then increased in the last two years (2017-2018). This revealed that, the growth of outstanding loan is encouraging. However, the rate changes of some years are fluctuating.

Regarding the saving amount of money and number of active clients, trends of continuous increment was observed. But as it can be seen from the tables the percentage change of increasing is fluctuating from year to year. The percentage change of saving balance is decreasing in year 2012, 2015, 2017 and 2018. The total saving of the MFIs increased from 2.02 billion ETB in 2010 to 33.2 billion ETB in 2018. Thus the collected data describes that the Ethiopian deposit-taking MFIs have shown a remarkable growth. This revealed that the performance of MFIs in Ethiopia with respect to saving is encouraging.

On the other hand, the number of active client increased from 2.3 million in the year 2010 to 5.1 million in the year 2018. Though, the percentage change of active clients increased from 2010-2013, there is fluctuation in the remaining years. Particularly, the percentage change in 2016 is very low as compared to other years, which is 1.30 %. This shows even though the outreach in terms of breadth is increasing but it is not continuous. It is assumed that the larger the number of clients, the better the outreach and thus, it leads the MFI to become more sustainable. According to data collected from the National Bank of Ethiopia, the number of borrowers of 27 MFIs in Ethiopia is reaching to 5,130,115 people in June 2018. Therefore, the status of MFIs in Ethiopia is promising and appreciable, though there is fluctuation from year to year.

4.1.2. Outreach – Depth (client poverty level)

There are various techniques for measuring client poverty level reports. Henceforth, the following rough proxy for poverty level of loan or savings at a point in time,

$$\text{Average outstanding balance per borrower} = \frac{\text{Gross amount of loans of outstanding}}{\text{Number of active borrowers}}$$

$$\text{Average outstanding balance per borrower(2011)} = \frac{6,825,148,900}{2,495,660} = 2,735$$

$$\text{Depth of outreach} = \frac{\text{Average loan balance per borrower}}{\text{GNI per capita/exchange rate}}$$

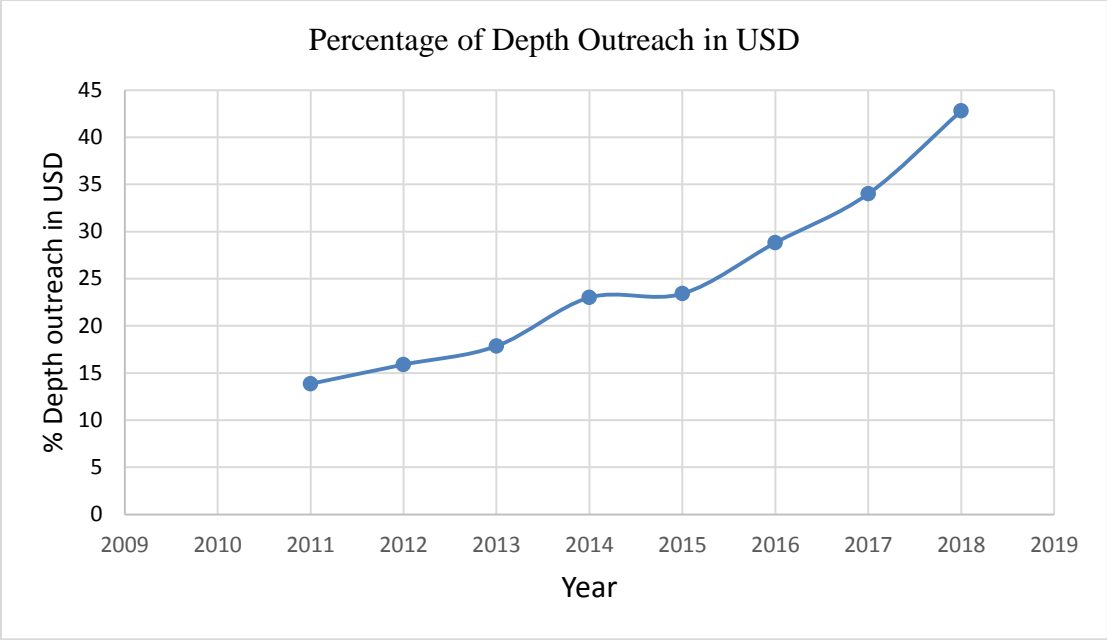
$$\text{Depth of outreach} = \frac{2,735}{716/27.579} = 0.1385 = 13.85\%$$

Table 2: Trends of depth of outreach indicators (2010-2018)

Indicators	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Average outstanding loan balance per borrower	NA	2,735	3,139	3,525	4,541	4,622	5,688	6,713	8,465	4,929
Depth of outreach (USD) (%)	NA	13.85	15.89	17.85	23	23.41	28.81	34	42.8	24.95

Sources: Researchers' on construction from data of NBE (2019)

GNI = 716 USD as of 2017, 1 USD = 27.579 as of June 2018



Source: Self construction (2019)

Figure 4: Outreach of depth of Indicator

As per the above mentioned table and graph, average outstanding loan balance per borrower is birr 4,929 and percentage of depth of outreach per capita GNI on average of the 27 MFIs in Ethiopia is 24.95%. According to (CGAP, 2009), average outstanding balance is roughly related to client poverty. An average outstanding loan below 20 % of per capita GNI is a rough indication that clients are very poor. Therefore, based on this definition, the clients of the Ethiopian MFIs are not poor because their outstanding loan of GNI per capita that varies between 23% to 42.8% particularly in the last 5 years (2014-2018) and 24.95% for (2010-2018) in average which is greater than 20%. Moreover, the percentage is increasing from year to year which revealed that the institutes are deviating from their mission. Therefore, the finding substantiates the mission drift where MFIs serves relatively non poor clients.

4.2. Loan repayment (portfolio quality)

Portfolio quality performance is the highest vital asset of microfinance institutions. Loan payment of microfinance reviews how the MFI measures, monitors and manages its loan portfolio together with delinquency and write-offs. Portfolio quality indicates the risk of loan delinquency and influences the future earnings and the microfinance institution’s ability to

extend outreach and serve current clients. A money lender’s ability to collect loans is essential for its success. If delinquency not maintained to very low levels it can rapidly spin out of control.

The international measure of portfolio quality in banking is portfolio at risk (PAR) beyond specific number of days.

$$\text{PAR (x days)} = \frac{\text{outstanding principal of all loans past due more than x days}}{\text{outstanding principal balance of all loans}}$$

The number of x days used for measurement varies.

In microfinance, 30 days is a common break point. As a rough rule of thumb when dealing with uncollateralized loans, PAR (30 days or one payment period) above 10 percent must be reduced quickly or they will spin out of control.

Portfolio at risk (PAR) 30 days of 27 MFIs in Ethiopia from 2010-June 2018 is summarized as follows:

Table 3: Portfolio at risk >30 days (Non-performing loans)

Indicators	Years									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
PAR>30 days rates (non-performing loans) (%)	3.9	4.8	3.3	4.3	2.9	3.3	4.9	5	4.0	4.5

Source: NBE (2019)

As it indicated on the table 3 above the values of PAR >30 days obtained from collected data of MFIs in Ethiopia for the last 9 years is between 3.3 % to 5% and in an average 4.5% which revealed that, there is a healthy loan portfolio. Therefore, the result of PAR reflects that MFIs of Ethiopia from 2010-June 2018 had very acceptable throughout the years. In addition it indicates the presence of better follow up activities made to clients throughout the nine years, however, in some years it shows trend of increase, For example in year 2016 and 2017 it increase from 3.3 % in 2015 and become 5 % in 2017.

4.3. Sustainability and profitability of MFIs

The performance of MFIs was usually reviewed based on sufficient revenue ability from the loan portfolio of the MFIs to cover operational and financial cost such as ROA, ROE, FSS, and OSS of the MFI that provide financial services in all the areas (Amaha & Kifile, 2016). Sustainability of MFIs is the ability of an institution to carry out activities and services in pursuit of its objectives. Sustainability is a very crucial factor for healthy expansion of MFIs in Ethiopia. In this research study operational sustainability (OSS), financial self-sufficiency (FSS), return on equity (ROE) and return on asset (ROA) were assessed to evaluate financial sustainability of MFIS in Ethiopia and the analysis and interpretations of data gathered is presented in the following section.

4.3.1. Operational Sustainability (OSS)

Operational self-sufficiency measures operating revenues as a percentage of operating and financial expense, including loan, loss, expense and the like. Operational self-sustainability takes into account the extent that financial revenue covers financial expenses, impairment losses on loans and operating expenses without performing adjustments for non-lending activities or other revenue like donations or grant and government support. Generally OSS includes all cash costs of running a MFI, depreciation and the loan loss reserve (Gebrehiwot, 2016). As most scholars agreed , operational self-sufficiency ratio is a measure of operational sustainability and if this ratio is greater than 100 percent, the MFI is covering all of its costs throughout own operations and is not relying on contributions or subsidies from donors to survive.

$$\text{It is defined as: } OSS = \frac{\text{Financial Revenue}}{\text{Finance expense} + \text{impariment loss} + \text{operating expense}}$$

4.3.2. Financial sustainability (FSS)

Financial sustainability or financial self-sufficiency refers to the ability for MFI to survive in the long run by means of its own income generating activities, i.e. without any contributions from donors. Financial sustainability (FS) describes the ability to cover all costs on adjusted basis and indicates the institutions ability to operate without ongoing subsidy (i.e. including soft loans and grants.) or losses. Financial self-sufficiency (FSS) is a subsidy-adjusted indicator frequently

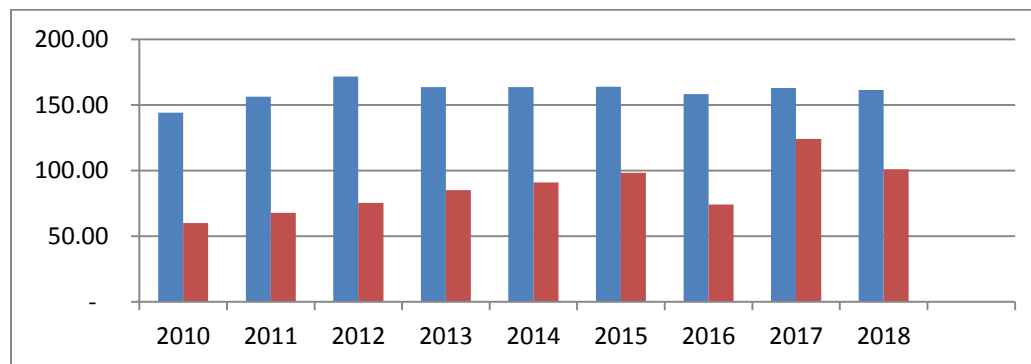
applied by donor funded microfinance NGOs. It measures the ability of the MFI to cover its adjusted costs from adjusted revenues without grants (donations). Based on the claim of most scholars, MFIs with FSS exceeding 100% rates is indicating of a long-run sustainability (financial self-sufficient) whereas, if the FSS is below 100 %, at that point of the MFI has not still attained financial breakeven.

$$FSS = \frac{\text{Financial Revenue}}{\text{Adjusted financial expense} + \text{adjusted net impairment} + \text{loss on loans} + \text{adjusted operating expense}}$$

Table 4: Operational self-sufficiency (OSS) and financial self-sufficiency (FSS) (2010-2018)

Indicators	Years of Operation									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	Av.
(OSS) (%)	144.1	156.3	171.6	163.6	163.8	158.2	158.2	162.8	161.4	168.6
(FSS) (%)	60	67.7	75.3	85	91	98.3	74	124.2	101	79.6

Source: Researcher’s own computation, NBE (2019)



Source: Researcher’s own construction ■ Operational self-sufficiency ■ financial self-sufficiency

Figure 5: Profitability indicators of OSS & FSS

As it was shown in the above table 4 and figure 5, concerning operational self-sufficiency there is trend of inconsistency trend from year to year. For instance there is increment from 2010-2012, whereas, there is trend of decrement from 2013-2016 and again raised in the last two years with an average of 168.6 for nine years for 27 MFIs in Ethiopia. Though there is inconsistency from year to year MFIs on Ethiopia performed well in terms of operational self-sufficiency for the year 2010-2018 because on average they performed more than the threshold level which is 100%. Therefore, the MFI is covering all of its costs throughout own operations and is not relying on contributions or subsidies from donors to survive, as result, their sustainability with respect to operating self-sufficient is encouraging.

Concerning financial self-sufficiency as it is shown on the table 4 and figure 5 above, there is a trend of increments from the year 2010 to 2016 whereas unexpectedly declined in 2016 and radical increment was observed in the last two years. Though an increment observed in the last two years (2017 and 2018) is encouraging, the MFIs should due attention why the change is fluctuating. In addition, the average value of FSS for the last nine year is 79.60% which is much lower than the breakeven point which implies that the ability of the MFI to cover its adjusted costs from adjusted revenues (largely interest reclined) without grants (donations) is under questions. Therefore, the sustainability of MFIs in the Ethiopia will face difficulty in this regard.

4.3.3. Return on Equity (ROE) and return on asset (ROA)

Return on equity (ROE) is a measure of profitability that calculates how much money (birr) of profit a company generates 1ETB of shareholder equity. Profitability measures, such as return on equity and return on asset are applied to summarize the performance in all areas of the company. If portfolio quality is poor or its efficiency is low, this will be reflected in profitability.

Moreover, ROE is more than a measure of profit; it's a measure of efficiency. A rising ROE suggests that a company is increasing its ability to generate profit without needing as much capital. It also indicates how well a company's management is deploying the shareholders' capital. However, it is important to note that if the value of the shareholders' equity goes down, ROE goes up. Thus, write-downs and share buybacks can artificially boost ROE. Likewise, a high level of debt can artificially boost ROE; after all, the more debt a company has, the less shareholders' equity it has (as a percentage of total assets), and the higher its ROE is.

The formula for ROE is:

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholders' Equity}} \quad \text{Or ROE} = \frac{\text{After tax profit}}{\text{Starting (or period - average) equity}}$$

Financial Self-Sufficiency (FSS) is a subsidy-adjusted indicator often used by donor funded microfinance. It measures the extent to which MFI's business revenue; mainly interest received covers the MFI's adjusted costs. If the FSS is below 100%, then the MFI has not yet achieved financial break-even. It is measured by dividing business revenue excluding grants for operating expenses.

Return on asset (ROA) measures how well the MFIs used all their assets. It measures the profitability of the institutions which reflects both the profit margin and the efficiency of the institutions. Therefore, return on assets (ROA), in basic terms, tells you what earnings were generated from invested capital (assets). Moreover, ROA for public companies can vary substantially and will be highly dependent on the industry. This is why when using ROA as a comparative measure, it is best to compare it against a company's previous ROA numbers or against a similar company's ROA.

The ROA figure gives an idea of how effective the company is in converting the money it invests into net income. The higher the ROA number, the better, because the company is earning more money on less investment. ROA is most useful for comparing companies in the same industry, as different industries use assets differently. For example, the ROA for service-oriented firms, such as banks, will be significantly higher than the ROA for capital intensive companies, such as construction or utility companies.

Both return on asset (ROA) and return on equity (ROE) are measures of how a company utilizes its resources. Essentially, ROE only measures the return on a company's equity, leaving out the liabilities. Thus, ROA accounts for a company's debt and ROE does not. The more leverage and debt a company takes on, the higher ROE will be relative to ROA.

Generally, return on equity (ROE) provides information on how much net income was earned on the equity of MFIs. In other words, ROE measures how the MFI has earned on the funds invested by the shareholders (donors). While their purposes are similar, ROE and ROA calculate

different information about your business. Thus, to measure business’s financial performance, calculating both ROA and ROE is paramount.

$$ROA = \frac{\text{After tax profits}}{\text{Starting (or period average) assets}}$$

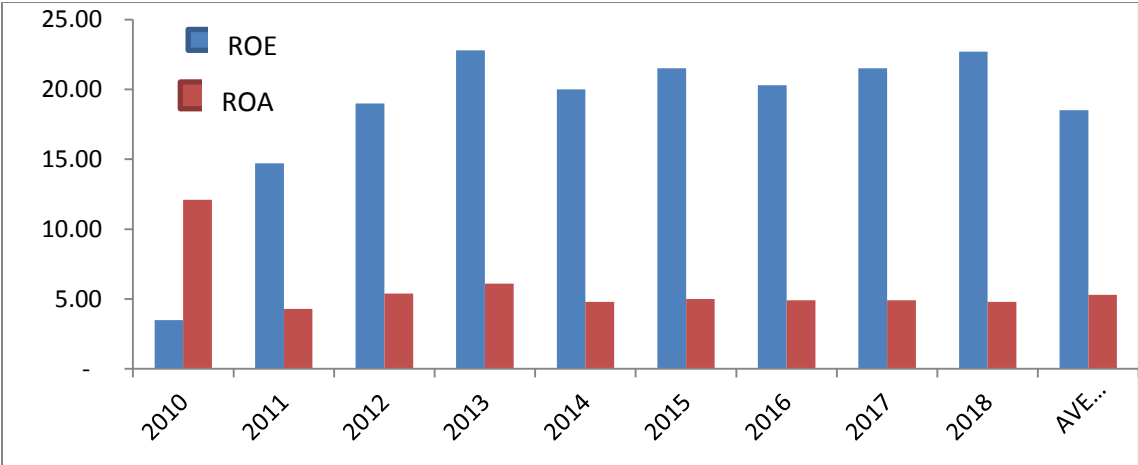
Because the numerator does not include non-operation items or donations and is net of taxes, the ratio is frequently used as a proxy for commercial viability.

Table 5: ROA and ROE trend analysis (2010-2018)

Indicators	Years of operation									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
ROE (%)	3.5	14.7	19	22.8	20	21.5	20.3	20.7	22.7	18.5
ROA (%)	12.1	4.3	5.4	6.1	4.8	5	4.9	4.9	4.8	5.3

Sources: Researcher’s own construction from data of NBE (2019).

Table 4.6 ROA and Roe trend analysis



Source: Self-construction (2019)

Figure 6: ROA and ROE trend analysis

As it is shown on the table 5 and figure 6 above, ROE of 27 MFIs in Ethiopia for the last 9 years (2010 - June 2018) 18.5% in an average, though they achieved below average general and breakeven point in particular as of the year 2010 and 2011, i.e. 3.5 and 14.7% respectively. This means that the 27 MFIS in Ethiopia generated 0.185 of profit for every 1ETB of shareholders' equity in the last 9 year as an average, giving the stock an ROE of 18.5%. Therefore, this revealed that MFIs in Ethiopia is increasing their ability to generate profit without needing as much capital.

Regarding the ROA value of MFIs in Ethiopia for the year 2010-2018 achieved 5.3% on average. But the achievement fluctuates from year to year, which in some years it achieves higher than average and again it goes down to below average. Most researchers explained that the best practice for industry average of ROE is $> 15\%$, and that of ROA is $> 6\%$ (Getachew, 2017).

Accordingly, the Ethiopian MFIs achieved better in terms of return on equity, whereas, they achieved below best practices of the industry in terms of return on asset.

4.4. Efficiency and productivity of MFIs (2010-2018)

The efficiency refers to the ability to produce maximum output at a given level of input, and it is the most effective way of delivering small loans to the very poor in microfinance context (Woller, 2000). To measure efficiency and productivity we can use Operating Expenses, Cost per Borrower, Personnel Productivity and Loan Officer Productivity as indicators (Micro Rate & Inter-American Development Bank, 2003). The performance of an MFI can also be measured by the number of borrowers per staff. This is a ratio of borrowers to staff indicating staff productivity. All things being equal the larger the number of borrowers a staff serves the higher will be his or her productivity (CGAP, 2003).

Efficiency and productivity indicators give an indication how well an institution performs operationally. Productivity indicates reflect the amount of output per unit of input while efficiency indicator also takes into account the cost of the input and/or the price of outputs.

Since these indicators are not easily manipulated they are more readily comparable across institutions than profitability indicates such as return on Asset and return on equity on the other

hand, productivity efficiency indicators measures are less comprehensive indicators of performance than those of profitability. The most commonly used indicator of efficiency expresses non-financial expenses as a percentage of the gross loan portfolio.

$$\text{Operating expense ratio} = \frac{\text{personnel and administrative expense}}{\text{Period} - \text{average gross loan portfolio}}$$

$$\text{Cost per borrower ratio} = \frac{\text{Operating expense}}{\text{Average number of active borrowers}}$$

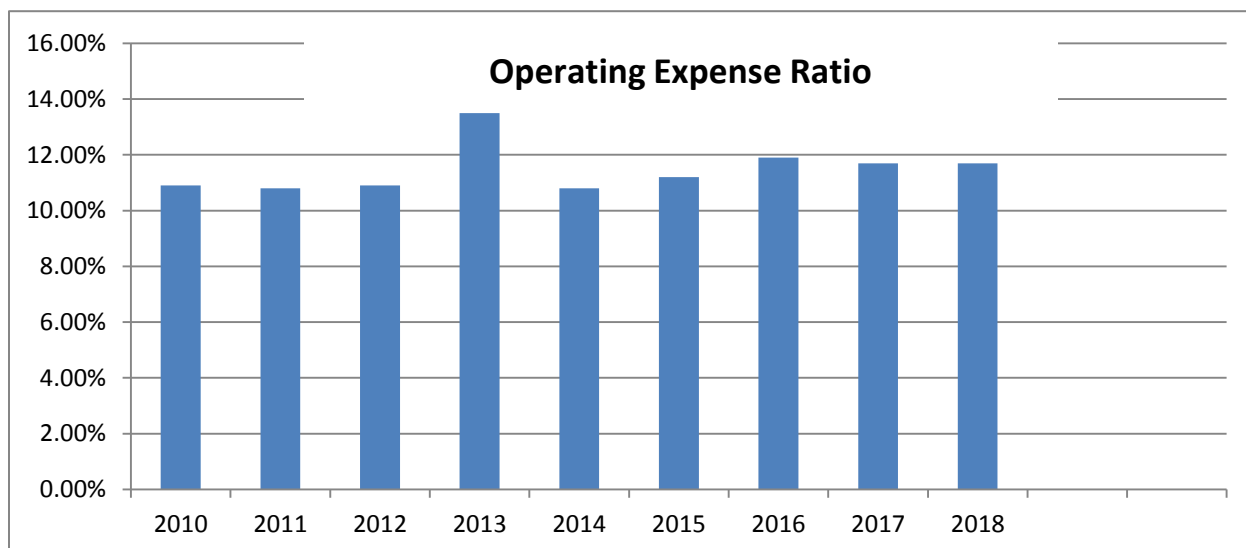
$$\text{Personnel productivity ratio} = \frac{\text{Number of active borrower}}{\text{Number of personnel}}$$

$$\text{Loan office productivity} = \frac{\text{Number of active borrowers}}{\text{Number of loan officers}}$$

Table 6: Trends in efficiency and productivity ratio (2010-2018)

Indicators	Years of Operations									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Operating expense ratio (%)	10.9	10.8	10.9	13.5	10.8	11.2	11.9	11.7	11.7	11.5
Cost per borrowers (%)	NA	277	308	416	380	411	594	647	842	433
Personnel productivity ratio	NA	NA	NA	178	180	159	141	147	150	159

Source: Researcher's own computations and NBE (2019).



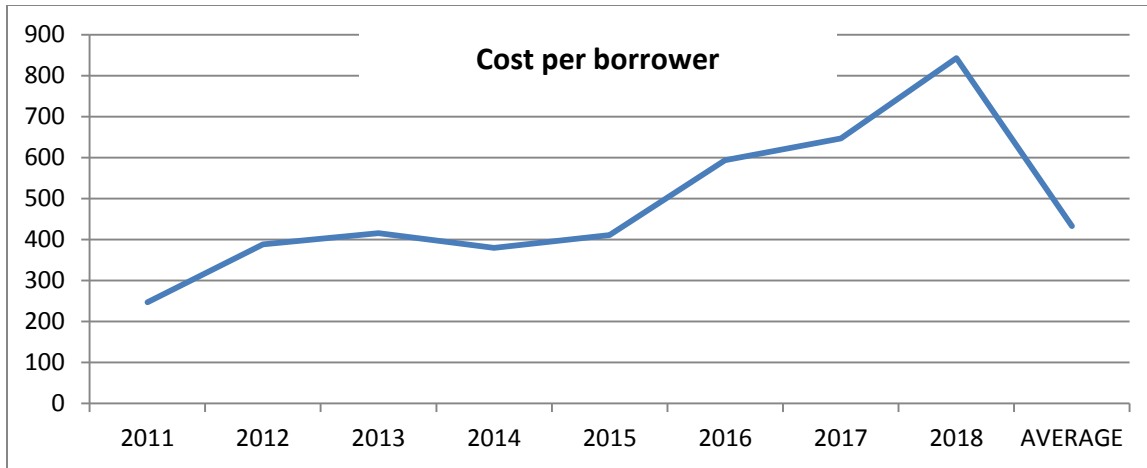
Source: Researcher's own construction (2019)

Figure 7: Trends of operating expense ratio

Operating expense ratio (OER):- is the most widely used indicator of efficiency. It allows a quick comparison between a MFIs portfolio yield with its personnel and administrative expenses how much it earns on loans versus how much it spends to make them and monitor them.

Its substantial drawback is that it will make MFI doing small loans look worse than MFI done large loans, even if both are efficiently managed. The institutional cost of providing loan is measured by operating expense ratio. When operating expense is lower, the institution experience higher efficiency.

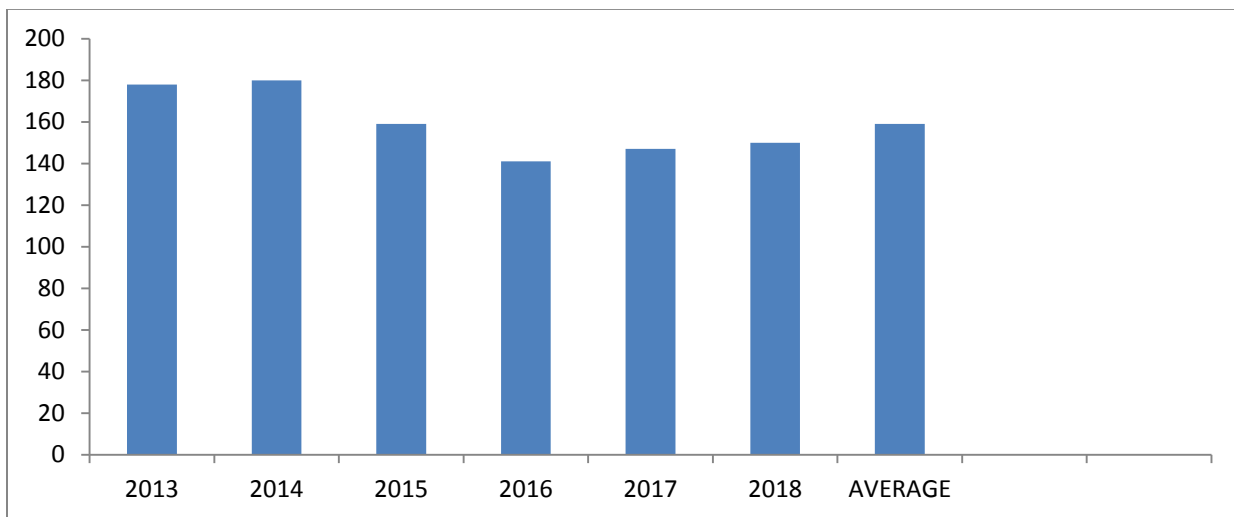
In this regard, MFIs in Ethiopia for last 9 years (2010-2018) achieved 11.5% on an average. According to (CGAP, 2009), only a few extremely efficient MFIs have an OER below 10 percent. According to this explanation, the OER of Ethiopia MFIs looks slight increasing, for example from 10.9 % in 2012 to 13.5 % in 2013 and 10.8 % in 2014 to 11.2 % and 11.9 % in 2015 and 2016 respectively. In general it shows a slight little fluctuation.



Source: Self construction (2019)

Figure 8: Trend in cost of borrowers

As it is shown in the above table and graph, MFIs of Ethiopia incurred an average cost of Birr 433 to serve a single borrower. Besides, during the year 2011 to 2013 and from 2015 to 2018 the cost per borrower is increasing continuously. Therefore, Ethiopian MFIs were paying highest cost to serve a single borrower.



Source: Self-constructed (2019)

Figure 9: Personnel productivity ratio

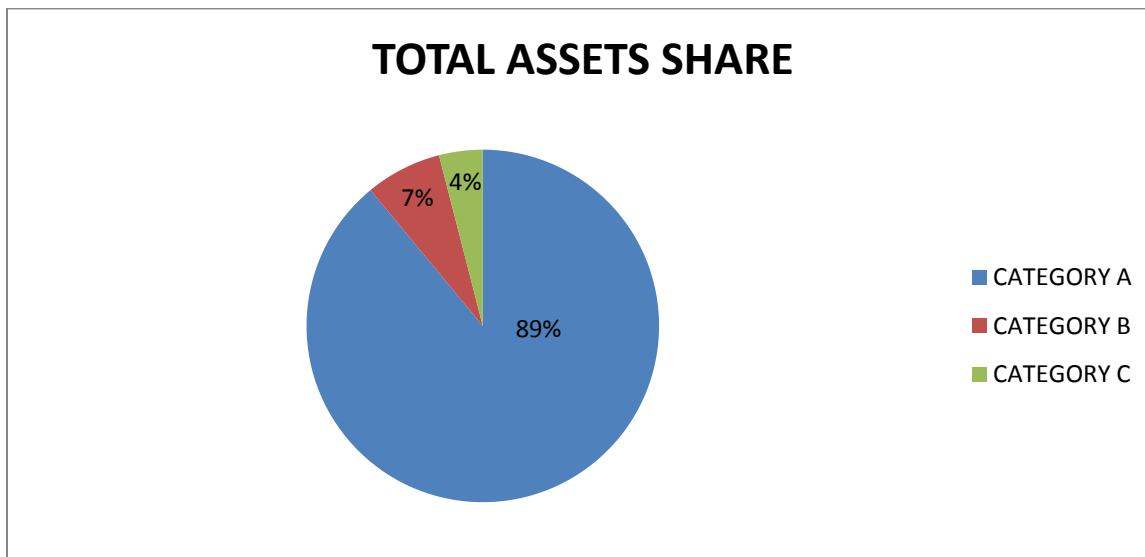
Personnel productivity ratio is a very important ratio for any financial institution since personnel costs are mostly the highest operating expense.

As it is observed from the above table and figure, on average a single loan officer served 159 clients per year. In the year 2013 and 2014 the loan officers served higher number of clients. But after that the increment of productivity is declined until 2017. In 2016 to 2018 they served below average.

4.5. Size MFI (Total Asset)

Microfinance institutions in Ethiopia have shown significant growth in their total asset. As of June 2018 the sector had a total asset holding birr 67 billion which represents an increase over 36 % compared to the preceding year (June 2017).

According to NBE classification, MFIs are grouped into three categories (Category A, B and C). In terms of these grouping, category A, which holds large MFIs, ACSI, DECSI, OCSSCO, Addis and OMO accounted for 89%.Category B (which holds thirteen MFIs) 7 % and Category C (which holds sixteen MFIs) 4 % of the total asset respectively.



Source: Self construction from data of AEMI

Figure 10: Total asset shares

As it was tried to show in the above pie chart, only five microfinances institutions are holding a size of total asset of 89%. This shows that these largest firms have the advantage of getting the access to credit finance for investment, possess a large pool of qualified human capital and have a greater choice for strategic diversification compared to the other MFIs. But the rest, twenty nine MFIs have less accesses of these advantages.

4.6. Age of MFIs

It is thought that as MFIs mature and acquire experience, they increase livelihood of allowing financial sustainability. Based on the maturity of the microfinance operations thirty four MFIs are classified in three groups (new, young and mature).(AEMFI, 2016).

Table 7: Classification of MFIs by age (New, young & mature)

Category	Definitions	MFIs under this category
New	Less than or equal to 4 years old	Nisir, Rays, Adeday, Afar
Young	Between and equal to 5 & 8 years old	Somali, Lideta, Lefayeda
Mature	Greater than 8 Years	ACSI, ADCSI, AGGAR, AVFS, Benshangul, Bussa, DESCI, Digaf, Harbu, Gasha, Meklit, Metemamen, OCCSSCO, Omo,PEACE, SFPI, Wassa, Sahshmene, Eshet, Sidama, Leta, Harar, Dire, Tesfa, Gambela, Dynamic, Wisdom.

Source: Self construction from data of NBE (2019)

As it shown from the above table, more than twenty-seven microfinance institutions in Ethiopia as of June 2018 have greater than 8 years' experience in the microfinance industry. Thus, more than 79% of the MFIs under the study have good experience 9 % have medium and 12% of them have less experience in the industry.

4.7. Peer group performance measurement of MFIs

As mentioned above National Bank of Ethiopia (NBE) grouped MFIs into 3 groups according to their performances, i.e. category A,B, and C). Some researchers also used this classification to measure performance indicators of MFIs (Gebrehiwot, 2016) and (Abdi & Batra, 2018). Thus, this researcher also tried to study the performance of MFIs in group.

4.7.1. Return on Asset and Return on Equity

The common measurement that is widely applied for profitability that reflects the institutions' efficiency and profit margin is return on asset (ROA), which is the ability of the organization to use its well assets of institutions have been used and return on equity (ROE) in which the produced returns on investment of owners are measured.

Table 8: **ROA and ROE of MFIs category A, B and C (2010-2018)**

Indicators	Categories	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
ROE in Percent	Category A	18.4	19.9	23	25.2	27.8	30.5	20.8	21	13	22.18
	Category B	32.6	31.8	31	37.7	41.8	45	39.1	35.3	30.3	36.07
	Category C	-5	4.32	12.2	16.6	13.1	17.1	17.1	15.8	15.7	11.88
ROA in Percent	Category A	6.13	5.57	6.17	6.45	6.35	7.25	4.92	8	9.2	6.67
	Category B	14.2	13.7	12.5	15	16.6	17.2	14.7	13.7	10.8	14.27
	Category C	-3.3	2.4	6.69	5.72	4.93	6.17	5.97	7.92	7.96	4.94

Source: Researcher own computation based on NBE categorization 2019.

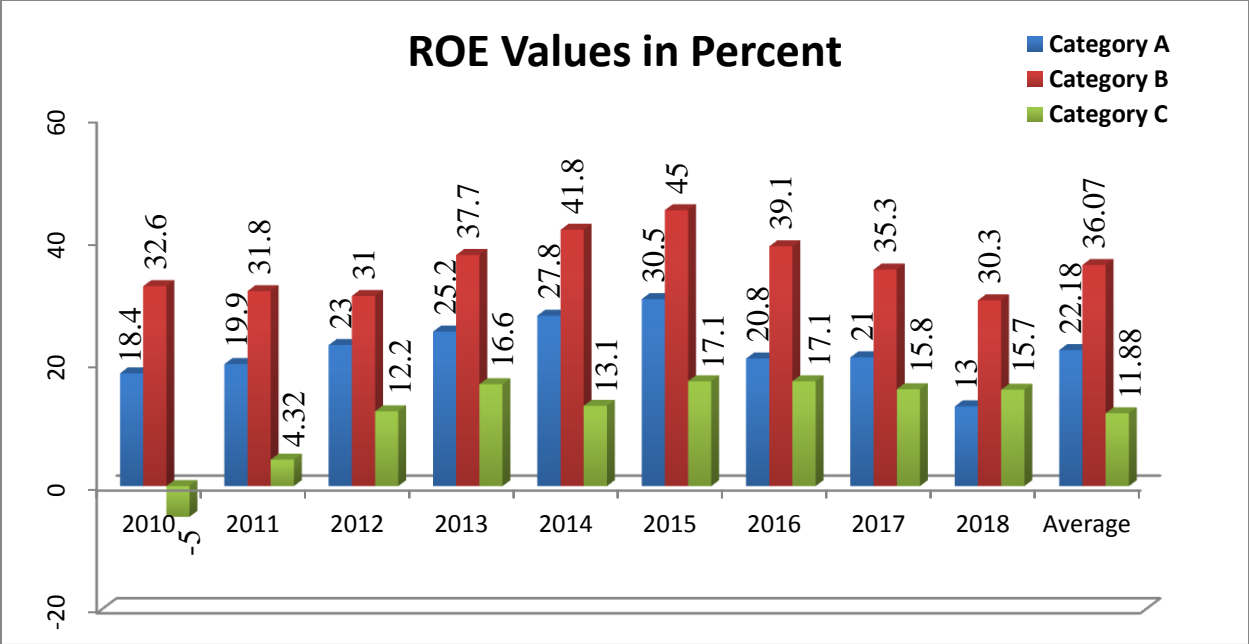


Figure 11: Returns on Equity of Category A, B and C MFIs (2010-2018)

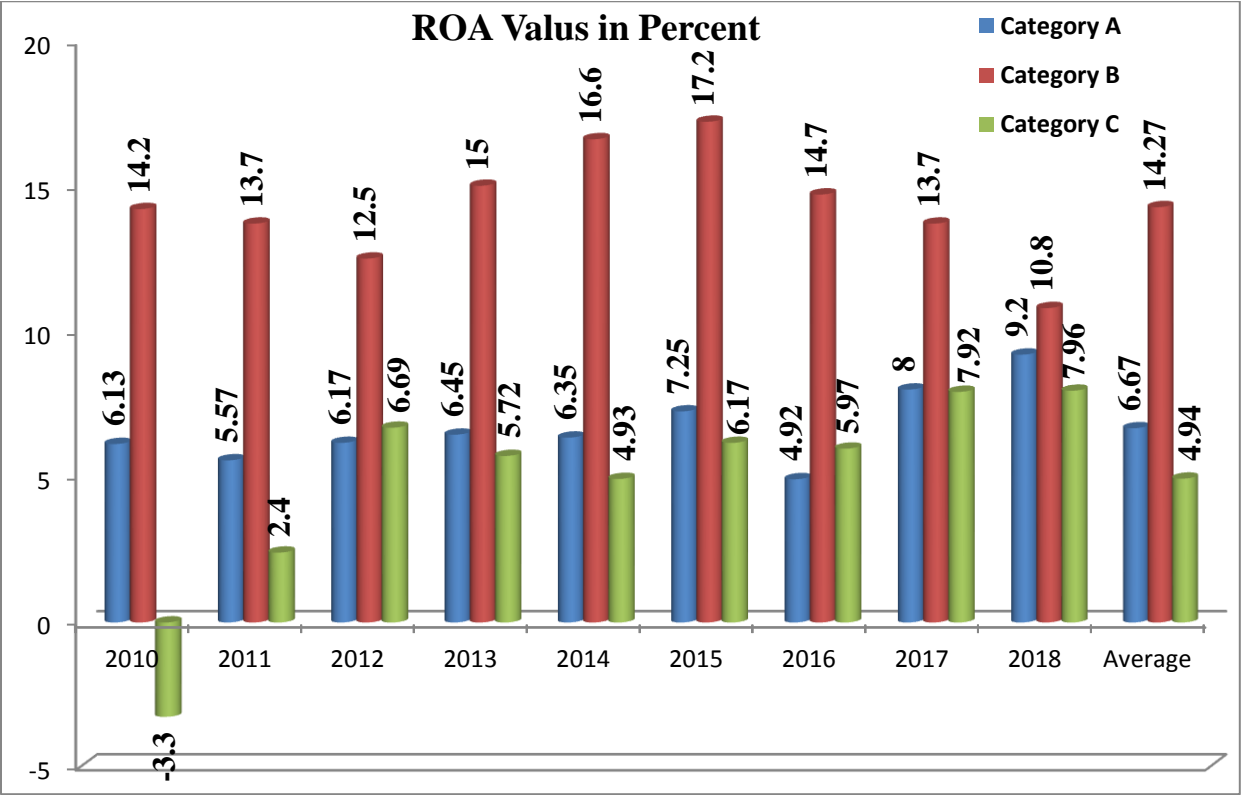


Figure 12: Returns on Asset of Category A, B and C of MFIs (2010-2018)

Based on ROA and ROE formula, the collected data of 9 years of audited financial report of 27 MFIs from NBE was calculated for the three categories of MFIs as shown on table 8. Accordingly ROE and ROA of category A MFIs has shown impressive improvement from year 2010 to 2015. Even though it has shown fluctuating from 2016 to 2018, overall the microfinance institutions in category A have shown in improving in the last nine years.

Similarly, concerning ROA and ROE of the category B MFIs, significant improvement have been seen in the years 2013-2015 and in the year 2016-2018 it experienced a little decline. Thus in both case there was fluctuating from year to year.

Moreover for category C as it is indicated on table 8 and figure 11 and 12, above significant improvements of ROA have been achieved from -3.3 % in 2010 to 6.69% in 2012. But from 2013 it shows little fluctuation and inclined nature in 2017 and 2018.

In comparisons, in both return on asset and return equity category B is better than category A and category C whereas category C is poor relative to the two categories. Moreover in technical language, Category A generated 0.2218 of profit for every 1ETB of shareholders' equity in the last 9 year as an average giving the stock an ROE of 22.18%, category B generated 0.3607 of profit for every 1ETB of shareholders' equity in the last 9 year as an average giving the stock an ROE of 36.07% and category C generated 0.1188 of profit for every 1ETB of shareholders' equity in the last 9 year as an average giving the stock an ROE of 11.88%. Thus, this revealed that category B is generating more profit than the two and category C generates less profit than the two.

4.7.2 Operational & Financial self-sufficiency

4.7.2.1 Operational self-sufficiency (OSS)

OSS measured the operating revenue as a percentage of operating expense; it includes expenses of loan provision. MFIs can only cover their all costs with their own revenue that generating from their financial or operation when this ratio (OSS) is greater than 100 %. It means that MFIs should not be dependent on the subsidies from donors so as to cover their operation costs.

4.7.2.2 Financial self-sufficiency (FSS)

FSS of institutions is very important for MFIs to get funds that are required to reach a large number poor society. As it was proven by (Devids et al, 1997) in their study based on working towards FSS while maintaining commitment in terms of serving the poorest people, there is not important trade-off in serving between the attainment of self-sufficiency of institutions and a large number of poor household. FSS and OSS of category A MFIs in Ethiopia is summarized below.

Table 9: **Operational self-sufficiency (OSS) & financial self-sufficiency (FSS) of category A, B and C MFIs (2010-2018)**

Indicators	Categories	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
OSS in Percent	Category A	195	214	211	206	204	212	166	219	220	205.22
	Category B	200	178	188	207	213	223	193	189	181	196.89
	Category C	85	111	127	141	156	160	162	165	175	142.44
FSS in Percent	Category A	95	114	111	106	104	112	66	65	74.4	94.16
	Category B	100	78	88	107	113	123	93	92	96	98.89
	Category C	-15	11	27	41	56	60	62	65	75	42.44

Source: Self-computation from NBE and other sources.

As it can be observed from the above table, category A MFIs is achieving greater improvement from 2010 to 2018 in the case of OSS, with exception of 2016 which is 166 % and the average OSS for the last 9 year is 205.22% which revealed that encouraging change was observed from year to year in particular. In additions OSS values are greater than the breakeven value which is 100%. This revealed that the MFIs under category A cover operational cost by their operating income. With regard to FSS values, trend of fluctuation was observed and the average values for the last 9 year is below breakeven point. Since FSS measures the adjusted income of the MFI relative to its adjusted costs, when adjusted income is lower than adjusted costs, the FSS measure is below 100% and the MFI is defined as subsidy dependent. Accordingly, since FSS value of MFIs of category A is less than 100%, it revealed that adjusted income is less than adjusted costs, as result the long run sustainability is uncertain. More over in the year 2016, 2017 and

2018 it is highly declined which in turn confirms that sustainability of category A is under big question. Therefore, we can conclude that the category A is subsidy dependent.

Concerning category B, though the OSS value fluctuate from year to year, the value of each year is greater than breakeven point with an average value of 196.89% for the last 9 years. This revealed that the operating income is sufficient enough to cover operational costs like salaries, supplies, loan losses, and other administrative costs. With regard to FSS values, it is below breakeven point, so that, sustainability of MFIs in category B are also subsidy dependent as to Category A.

With regard to category C, OSS is greater than breakeven point, therefore this group of MFIs are also cover their operating cost by their operating income, however, the FSS value is by far less than breakeven point, which revealed that these group of MFIs are highly subsidy dependent ,therefore their sustainability is at risk.

4.7.3 Efficiency of peer category

The operating expense ratio is one of the commonly applied efficiency indicators that express expenses that are non-financial as a percentage of the gross loan portfolio and can be calculated by dividing all expenses related to the MFIs’ including all salary and administrative expenses, depreciation and board fees by period average gross portfolio. However, expenses that are extra ordinary are not included.

Table 10: Peer group OER of category A, B and C Ethiopian MFIs (2010-2018)

Indicators	Category	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
OER (%)	Category A	8.5	7.2	8.2	8.5	9	9.2	11.1	6.5	5.5	8.19
	Category B	18.8	23.1	19.6	18.6	19.6	18	20.8	14.4	13.7	18.51
	Category C	38.5	36.9	34.2	23	19.6	21	25.6	18.5	21	26.48

Source: NBE and others (2019)

As it is shown in the above table, OER of category A fluctuated from year to year and in the years 2017 to 2018 it was decreasing which is encouraging because low ratios of operating expenses to gross loan portfolio imply a high efficient management.

Concerning category B, as it can be observed from the above table 10, the OER fluctuated over the study years and declining in the years 2017 and 2018. Though, decrement of OER at the end of study years (in 2017 and 2018), it is still large which negatively impact the efficiency of MFIs under this category.

According to grouping of NBE, OER of MFIs' under category C is higher than the other categories (A & B). Though, it is decreasing in 2017 and 2018 still it is inefficient in relative to category A and Category B.

Generally, category A is more efficient than category B and category B is more efficient than category C.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

The result of the data analysis and discussions, and pertinent interpretations based on the discussion were presented in chapter four. This last chapter first summarizes the study carries out on the performance of MFIs in Ethiopia from the year 2010-June 2018 and the conclusions and possible recommendations on major findings have been forwarded.

5.1 Summary and Findings

The following conclusions are drawn from this study.

The study was based on a 9 years secondary data of 27 audited MFIs of Ethiopia obtained from the national bank of Ethiopia. This study mostly focused on how the performance of Ethiopian MFIs in terms of outreach, financial profitability, financial sustainability; and efficiency. Among these variables a financial ratio such return on asset (ROA), return on equity (ROE), financial self-sufficiency (FSS), and operational self-sufficiency (OSS), age and size were assessed as dependent and independent variables. The results of the study indicated that performances of MFIs are poor in terms of FSS which was below breakeven point suggests that MFIs are subsidy dependent. Whereas, the depth outreach is not stands for poor people living under the poverty line implies that there is incapable of mission drift. With regarding to ROA, the average value is less than standard which implied that the profitability is not hopeful. Therefore, their performance needs to be improved as they were not covering their financial breakeven to mean that some of the MFIs in Ethiopia cannot cover their operating expense, but are good in terms of breadth outreach, efficiency, portfolio quality and ROE jointly.

From the above summary the researcher made the following major findings are drawn.

Most of Ethiopian microfinances are occupied by a few microfinances institutions which are handled about 89% by five MFIs. Based on MFIs under study the financial sustainability of Ethiopian microfinance in percentage values are below breakeven point that shown as it is subsidy dependent and depth outreach is above the allowed standard which is 20% that indicated us the microfinance institutions are not serving poor which divert from the mission of MFIs in

Ethiopia. The average value of return on asset is also below the permissible value which is 5.3% which indicated that the profitability is not as such encouraging. Whereas, return on equity average value which is 18.5% is more than the standard value which revealed that for one ETB of shareholder equity 0.185ETB profit was obtained which is hopeful.

Collection performance of portfolio quality of the institutions throughout the study period at PAR >30 day on average achieved 4.5 %, which is a better performance. But in some of the years shows a trend of increasing. In terms of sustainability or profitability, operational, financial sustainability were discussed. Regarding to operational self-sufficiency (OSS), the MFIs performed well above the threshold of 100%. But their average financial self-sufficiency (FSS) was below the breakeven point.

With respect of efficiency and productivity of MFIs various indicators such as operating expense ratio(OER) cost per borrower ratio, personnel productivity ratio were applied to assess their performance. Regarding OER, the selected MFIs achieved on average 11.5%. It also fluctuates from year to year.

In terms of personnel productivity ratio, on average a single loan office served 159 clients per year. Their performance of service was decreasing from year to year and in the year 2018 they served below average. Regarding return on equity (ROE) and Return on asset (ROA), Ethiopian MFIs achieved more than best practices of the industry on ROE and below best practices in the case of ROA. In the case of total asset, only five MFIs covered a percentage 89% of total asset share. The rest twenty two MFIs shared only 11 %.

In terms of experience, Ethiopian MFIs most of (79 %) achieved larger years' experience in the microfinance industry.

5.2 Recommendations

Based on the findings of the study, the following recommendations are thought feasible by the researcher.

Even though the number of clients of MFIs in Ethiopia is increasing from year to year, it is a very little compared to the population of Ethiopia. Therefore, maximum effort must be done to

make society at large the beneficiary of the service of MFIs. The MFIs should have work hard to get more motivated borrowers and savers all over the country.

In addition the number of MFIs in Ethiopia is very small for the country which has more than one hundred million people. The Government should also give various incentives to make the outreach of MFIs because outreach is the central purpose of successful MFI.

Since MFIs average financial self-sufficiency was below breakeven point during the study period of years (2010-2018), they should have to work on it in order to increase it. They also must work hard to increase personnel productivity ratio by giving training and education to their employees.

In general, to increase outreach service productivity and sustainability efficiency and experience, massive effort must be applied. For this to happen, higher saving mobilization, product expansion , efficient loan management and better resources management should be sighted in depth by the MFIs to achieve better performances. New technologies like e-mobile, software and other infrastructures needs special attentions by the government, the MFIs and other concerned bodies.

5.3 Scope for further research

Finally, the indicators which were applied in this research study independently are not enough to measure the performance of the MFIs and the researcher has not made analysis by applying other financial and operational indicators like financial management and various accounting practices across the industry. Thus, alternative performance measuring indicators can be considered by other researchers.

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