Master's Thesis

The Impact of Microfinance Institutions on Poverty Alleviation (A Case Study in Ethiopia)

by

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Certification

I, REDA KiflieHayleeyesus (Student ID 52114605) hereby declare that the contents of this Master's Thesis are original and true, and have not been submitted at any other university or educational institution for the award of degree or diploma.
All the information derived from other published or unpublished sources has been cited and acknowledged appropriately.

REDA KiflieHayleeyesus
2016/05/31

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Abstract

This research aimed at assessing the impact of microfinance institutions on poverty alleviation a case in Ethiopia. Poverty is a worldwide phenomenon and particularly series concern for under developed countries like Ethiopia. Microfinance has been used as a development tool with the main objective of poverty alleviation. The study tried to test the two hypotheses by deploying specific impact assessment tools.

1. MFIs in Ethiopia are sustainable enough to facilitate the financial intermediation and support the poverty alleviation effort in the country
2. Participation of clients in microfinance program would bring about significant reduction in the level of poverty.

The study used two impact assessment models to test the hypotheses, institutionalists model to address the first hypothesis using 12 years of outreach, financing structure and financial performance data to measure how sustainable and profitable the Ethiopian MFIs are in comparison with the African MFIs average performance and Grameen Bank of Bangladesh. The welferists model is used to test the second hypothesis using a structured survey questionnaire distributed to 60 respondents to measure the income increment, asset possession, quality of life improvement, access to education, access to health care services and other more poverty indicators. As the result of analyzing the

financial and outreach related data collected from various sources the study concluded that the Ethiopian MFIs are working well and their contribution towards the poverty reduction is in a better position. The study compared the performance of Ethiopian MFIs with African MFIs average performance and Grameen Bank of Bangladesh and come up with a conclusion that in most indicators, the Ethiopian MFIs are performing better than the African average. The Ethiopian MFIs are relatively very small compared to Grameen Bank and much is remained to be in the same standard with it.

KEY WORDS: Microfinance, Poverty, sustainability, Outreach, Welferists view, Institutionalists view

1. CHAPTER I: INTRODUCTION

Background

1.1 Overview of Microfinance and Poverty

It is necessary to start with the meaning and definitions of the concepts of microfinance and poverty as they are the main pillars of the research looking in to their relationship and the impact of one on another. Definition of microfinance institutions (MFIs) proposed by different scholars and international organizations. “Microfinance refers to the provision of small scale financial services including microcredit, savings, payment services, micro insurance and other services to the rural and urban poor clients who don't have access to the banking services on sustainable basis” (Parker, 2000). Asian Development Bank (ADB) also provided a more or less similar definition,“microfinance as the provision of a broad range of financial services such as deposit, loans, payment services, money transfers and insurance to the poor and low-income households and their micro-enterprises” (ADB, (Ledgerwood J. , 1998) 2000). The World Bank suggested a little bit different definition for microfinance by linking it with development. Microfinance refers to the provision of financial services to low-income clients, including the self-employed. Microfinance is not simply banking, it is a development tool. Microfinance activities usually involve:

- ✓ Small loans, typically for working capital

- ✓ Collateral substitutes, such as group guarantees or compulsory savings
- ✓ Access to repeat and larger loans, based on repayment performance
- ✓ Streamlined loan disbursement and monitoring
- ✓ Secure savings products (Ledgerwood J. , 2002)

Similarly, different authors have given different definitions for poverty. Poverty is by far a multidimensional concept which includes inadequacy of income, deprivation of basic needs and rights and lack of access to production assets as well as to social infrastructure and markets (Birrie, 2015). In the past, poverty was largely ascribed to inadequate income. Recent studies however, emphasize that poverty is a multidimensional phenomenon encompassing, among others, lack of resources and assets (material deprivation), poor or lack of access to basic social amenities such as access to education, access to health care service and clean water, absence of employable skills and limited knowledge /information as well as deprivation of basic human rights that has economic, social and political implications (Parker, 2000).

Due to its multifaceted nature, tackling poverty effectively and sustainably requires coordinated and integrated efforts. Poverty alleviation measures should incorporate, among others, social, economic and physical interventions. The provision of financial

service to the poor is therefore one of the measures that can contribute to efforts aimed at alleviating poverty. As noted by Rajasekhar (2004), financial outreach programs aimed at providing material and other opportunities for the poor should be seen as one of the tools being practiced by developing countries in their efforts to deal with poverty reduction. (Rajasekhar, 2004) (Schreiner, 2002)

One of the bottlenecks in improving the wellbeing of the poor people in developing and under developed poor countries is lack of access to credit from formal financial institutes that invariably requires collateral (Schreiner, 2002). Most, if not all, of the loan available to the poor in such developing countries is obtained either from family, friends or informal money lenders. When the poor resorts to get loans from informal credit providers such as money lenders, business men and pawn brokers, they are usually charged a very high interest rates and forced to handover whatever valuable items they may possess as collateral which in the case of failure to pay may not be collected back; and this may lead them to a worsethan their pre-loan situation.

Microfinance emerged as a better alternative method for satisfying the credit needs of the poor in their efforts to improve their livelihood and move out of poverty.

Microfinance appears to be an alternative and organized means of getting credit service for those marginalized or financially excluded portion of the population and subject to exploitation by the informal money lenders. The clients of MFIs are in the main low income persons who are self-employed and hence engaged in micro and small enterprises (Schreiner, 2002).

Microfinance, as a poverty reduction strategy first started by Grameen Bank of Bangladesh in 1970s. The Grameen Bank practice has been expanded to various parts of the world; Asia, Latin America and Africa (Aghion and Morduch, 2004). Different authors mentioned different roots for microfinance, but the most widely accepted historical foundation is the story of the renowned economist Professor Muhammad Yunus and the Grameen Bank. Muhammad Yunus, the founder of Grameen Bank in Bangladesh started a series of experiment by lending a small amount of money to the poor households in a small village called Jobra in the year 1976. Through his experiment, Yunus demonstrated that the poor not only make profit from the loan they get but also that they can repay the loan in a reliable way.

Microfinance becomes a viable poverty alleviation strategy and the experience of

Grameen Bank considered as a best practice during the 1970s and has seen considerable expansion since its introduction in other parts of Asia, Latin America and Africa (Aghion and Morduch, 2004).Professor Yunus and Grameen Bank demonstrated that the poor can not only profiting greatly by access to loans but also they were repaying reliably. Women making the majority of Grameen Bank borrowers were more reliable than their husband (Khandker, 1999). This practice also displays the poor can make a reasonable amount of saving as the result of engagement in microfinance activities and accumulate assets out of the income generating activities due to their access to credit. In the process, Grameen Bank's approach had put a distinction between "poor" and "working poor" which refers that if proper financial intermediation is provided to the poor, they can generate income and run out of poverty.

The mode of "group lending" up on mutual monitoring was the innovation of Grameen Bank that allowed it to grow fast, as it allows poor borrowers to act as guarantors for each other. With this innovation, loans were provided to households organized as a group and act as collateral for one another removing the physical collateral requirements and replacing it with community trust and shared accountability to ensure the repayment of loan balances. Group lending, thus, takes advantage of local

information, peer support and pressure. Adoption and replications of the Grameen bank model now exist in many countries all over the world (Aghion and Morduch, 2004).

Microfinance is an institution that provides the poor with savings, credit and insurance facilities with the objective of setting up or expanding income generating activities. It aims at household income security and hence has a broader aim than the simple provision of micro credit (Rajasekhar, 2004). In addition, microfinance institutions also provide entrepreneur, business management, marketing and financial management related support services and trainings to their beneficiaries (Aghion and Morduch, 2004). Microfinance institutions encourage their members/beneficiaries to save and as their saving balance grows more the loan balance they can access become higher. This way, microfinance helps poor households diversify their income, acquire more assets and improve their lifestyle (Ledgerwood J. , 2002). According to Ledgrwood, 2000 microfinance institutions have a broader financial and development objectives mainly focused in poverty reduction. These broad objectives may include the following;

- To enable the poor get access to financial services and engages in micro businesses.
- To empower women or other disadvantaged sections of the society.

- To help the expansion of existing businesses
- To encourage the development of new businesses (Ledgerwood J. , 2002).

1.2 Evolution of MFIs in Ethiopia

In Ethiopia, as in other developing countries, financial services that can be provided to the poor by conventional banks are extremely limited. High costs of administering small loans and lack of acceptable collateral are cited as the major factors that hinder formal financial institutions from serving the rural poor. As a matter of fact, the delivery of financial services and microcredits to the low income poor households has a relatively short history in Ethiopia, which has its roots in micro lendingpackages that were introduced as a component of relief related operations conducted by non-governmental organizations' (NGO's) in the late 1980s.

The decision of the government of Ethiopia to liberalize and restructure the financial sector in the 1990s had a significant impact on the growth of MFIs. Ethiopia laid down a legal framework for microfinance institutions (MFIs) by proclamation No. 40/96. The issuance of this proclamation is seen as an important breakthrough followed by a number of regulatory directives and policies that help to protect and ensure the

prudential safety of Microfinance institutions. Similar to Banks, MFIs service provision also involve public property in the form of savings and credit that requires supervision and regulation of the activities of MFIs by the state with a view to ensuring sustainability and protection of depositors interest (Hailu, 2006). Following the enactment of this proclamation, several micro credit programs that were previously operated by non-governmental organizations or various central and regional government departments were transformed in to licensed microfinance institutions subject to regulation and supervision. The institutional set up and operational procedures of the Ethiopian MFIs are the direct copy of Grameen Bank's mode and group lending practice is widely used.

1.3 Poverty in Ethiopia

Ethiopia is one of the poorest countries in the world and the prevalence of poverty has been a common phenomenon in the Ethiopian history. Agriculture is the major economic activity that employees over 85% of the population characterized by very primitive and less productive as it is even inadequate to feed the growing population. Similarly, the manufacturing and service industries in the country are under developed.According to WoldayAmha (2000), the major causes of the high incidence of

poverty in Ethiopia include lack of asset, employment opportunities, income, skill, education, health, etc. [Moti, 2003].

TABLE 1.1: Poverty headcount ratio for national poverty line (per adult) and the US$1.25 PPP poverty line (per capita)

	1996	2000	2005	2011
National Poverty Line	45.5%	44.2%	38.7%	29.6%
Urban	33.2%	36.9%	35.1%	25.7%
Rural	47.6%	45.4%	39.3%	30.4%
US$1.25 PPP Poverty Line	60.5%	55.6%	39.0%	30.7%

Source: Own calculations using HICES 1996, HICES 2000, HICES 2005, HCES 2011 and Povcalnet (June 2014).

Table 1 Povery status, Ethiopia

Source: **(World Bank Poverty assessment report, 2014)**

As the study used a comparative analysis of the Ethiopian MFIs with the performance of Grameen Bank of Bangladesh, it is very important to show the economic realities and poverty situations in both countries. Grameen Bank is operating in a country (Bangladesh) with a GDP of USD 173.8 billion in the year 2014that is almost double compared with Ethiopia, with a total population size of 159 million which is again twice much than Ethiopia. The poverty data for Bangladesh is presented in the following table.

Table 1.1: Poverty Headcount Rates

	Poverty			*Extreme Poverty*		
	2000	2005	2010	2000	2005	2010
National	48.9	40.0	31.5	34.3	25.1	17.6
Urban	35.2	28.4	21.3	19.9	14.6	7.7
Rural	52.3	43.8	35.2	37.9	28.6	21.1

Source: All estimates are CBN based on HIES 2005, updated for 2010, and back-casted for 2000. 2010 update: survey-based food prices and non-food allowance re-estimated using "upper" poverty lines. Official Poverty Lines estimated for HIES (2000, 2005, and 2010).

Table 2 poverty status, Bangladesh

Source: **(Bank World, June 2013)**

Bangladesh and Ethiopia seems to have a relatively similar poverty situation and MFIs operating in both countries may serve a relatively same customer base. In this regard, Grameen Bank can be a good representative to compare with regardless of its long time experience and big size.

1.4 Statement of the problem

Microfinance in Ethiopia is a recent phenomenon and the poor households in the country remain with limited access to formal financial services. Despite the recent progress in the poverty reduction, 30% of the population still living under poverty line which requires various types of measures including access to financial resources. In this connection, improving the operational performance of the existing MFIs and upgrading the scale of outreach requires due attention and policy intervention to reduce the prevalence of poverty in the country. There has been a couple of incidents whereby

microfinance institutions failed to be sustainable and bankrupted in the country that invited a study to be conducted on how should the credit market operate and microfinance institutions be organized so that they can effectively discharge their development agenda. Besides the shortage of loanable funds, how efficiently MFIs use the available financial resource and how can they raise more funds remains a critical question in the Ethiopian microfinance industry.

1.5 Objective of the Study

The ultimate objective of Microfinance institutions in Ethiopia is to contribute to the poverty alleviation. The objective of this assessment is therefore, to analyze the operational performance of the MFIs operating in the country and the development of microcredit market with respect to institutional setup and performance indicators. Besides this, the study also assesses the extent to which microfinance institutions contribute for improving the welfare of the poor. In this study, the scope of outreach of MFIs, sustainability and profitability of the institutions and financial performance and risk exposure of the institutions is assessed.

1.1 Significance of the study

Findings of the study is expected to contribute a part on how the microfinance institutions and credit market should operate, the level of risk MFIs are in and the appropriate financing structure that suggests sustainable business. The study will indicate the loopholes and deficiencies in service provision by collecting data from the customers and help the MFIs to design their products and services in accordance with their customer's demand. Moreover, the study will indicate the performance level of Ethiopian MFIs in comparison with the best practice from Grameen Bank of Bangladesh and help to indicate the weakness and strength for future development.

1.6 Research questions

The research questions the study tried to answer through data analysis by utilizing the appropriate methodology includes;

- How do the Ethiopian MFIs perform in the last decade to reach to the poor and support the country's poverty reduction effort?
- Are the MFIs in Ethiopia sustainable/prudent enough to guarantee a stable credit market and how is their performance compared with the MFIs in other countries?
- How is the reaction of beneficiaries of the MF program? how is the real impact of

reducing poverty level at the household sector?

1.7 Scope and limitations of the study

The scope of this study is limited only on the financial data, the socio cultural and political factors that have a greater impact on the credit market establishment and performance is not addressed. Moreover, the research made a performance comparison of the Ethiopian MFIs with Grameen Bank of Bangladesh which is a well-established and highly advanced institution that created a huge performance gap in some of the variables.

1.8 Organization of the paper

The study contains five chapters. The first chapter deals with introduction that includes background of the study, statement of the problem, objective of the study, significance of the study, the research questions and scope and limitation of the study. In the second chapter, relevant literatures are reviewed; research questions and hypothesis of the study are presented. The third chapter deals with the research methodology through which the study approached to answer research questions. In the fourth chapter, the paper

presented detailed data findings, discussion and analysis on the basis of outlined methodology classified as Outreach indicators, financing structure, financial performance and finally summary of the data collected through questionnaire. The final part, chapter five discusses the conclusion and recommendation.

CHAPTER II
2.1 Literature Review

This chapter deals with the various theories and findings from previous literatures and intended to provide theoretical basis for the research. There is a further renewed interest on microfinance institutions because micro-credit is thought to be an instrument for reducing poverty (Ledgerwood J. , 2002). However, counter arguments are also found from the literatures that micro-credit provided by microfinance institutions does not necessarily guarantee the reduction of poverty. Although the innovation in MFIs have made loans more available to poor people, still there is some debate in the design of appropriate financial services for the poorest [Morduch, 1998]. Microfinance credit for micro-enterprises, group lending practices and the pursuit of financial sustainability of microfinance institutions are among the best practices (innovative activities) of microfinance [Yaron, 1997]. But, all these practices are not necessarily effective in reducing extreme poverty. According toHulme and Mosley, credit is only one factor in the generation of income or output. There are other complementary factors, crucial for making credit more productive. Among them, the most important is recipient's entrepreneurial skills [Mosley, 1998]. WoldayAmaha, 2007also point to this factor that most poorpeople do not have the basic education or experience to understand and manage even low level business activities. They are mostly risk-averse, often fearful of

losing whatever little they have, and struggling to survive. For that, microfinance institutions service should incorporate the provision of enabling skills through training and capacity building programs (Wolday, 2007). Furthermore, borrowers who already have asset and skill are able to make use of credit. The poorest are less able to take risk or use credit to increase their income. Some poorest borrowers become worse off as a result of micro-enterprise credit because credit exposes those vulnerable people to high risks. For poor people business failure is likely to provoke livelihood crises than for borrowers with more secure asset base (Mosley, 1998).

On the other hand, opposite arguments are also raised on group lending practice that said group lending for income generating projects may not be appropriate as a strategy to reduce extreme poverty. Some evidences (for example, Osamani, 1989; Montgomery, 1996) show that self-selected group for peer monitoring have not been inclusive of the poorest people. People select those with whom they want to form a group on the basis of their own knowledge of the likelihood that these people will make timely payment of loan and saving installments. This might lead to the exclusion of the poorest people (Osamani, 1989) (Montgomery, 1996). Contrary to this view, many also argue that group lending is a useful innovation whereby the poor, having no physical collateral can

access credit through this system.According to Jansen and Pippard as sited by Yasushi SUZUKI, 2013,a manageable group size may contribute to screening out potentially bad borrowers, and peer pressure also makes the repayment more likely (SUZUKI et.al, 2013).

Literature also shows us that there is a growing controversy as to how should the performance of the microfinance program be assessed. In this regard two contrary arguments are proposed by different scholars and practitioners. Some researchers are interested in determining the impact assessment of microfinance program by measuring the client's financial capacity and 'change' by considering factors like assets or incomes. On the other hand the other category recommended that an institutional level analysis focusing on such indicators as a program's contribution to the development of financial market should be used. The first approach emphasizes impact on the borrower as the core mission of MFIs whereas the latter aims at integratingmicrofinance in the financial markets (Nitin, 2001). These two blocks are called as welfarists and institutioalists. Welfarists concentrate on the level of poverty of the customers and emphasize the fast improvement of their living conditions, even with a broad recourse to subsidies. They also argue that measuring the impact of micro credit should be on the living conditions of the targeted populations, the change in terms of wellbeing and quality of life of the

recipients (Imene, 2009). The institutionalists approach has mostly gain a wide acceptance and support from international organizations such as the World Bank and the United Nations and advocate that the one best way to reach the large majority of the poor without access to financial services is to integrate microfinance in the formal financial system. According to Institutionalists, each microfinance institution should aim at financial sustainability by maximizing its effectiveness and its productivity, in order to reach financial autonomy (Imene, 2009) (Morduch, 1998). Institutionalists believe that microfinance institutions should work towards a large scale intervention;this may require a financial resource in the form of loanable funds that might even be beyond donors can provide. They further argue that microfinance institutions that depends more on donors will becomes structurally dependent on subsidies, and in the end have a less probable sustainable future. According to institutionalists, the best way for microfinance institutions to remain financially sustainable is getting financial resources from private sources such as savings, commercial debt and traditional equity financing. (Imene, 2009) (Nitin, 2001)

The following table summarizes the approach, target, method and criticisms of each school of thought.

Summary table: *welfarists* and *institutionalists*

	Welfarists	***Institutionalists***
Approach	Performance evaluation from the standpoint of customers: - Social outreach - Impact assessment	Performance evaluation from the standpoint of the institution: - Broadness of the MFI - Sustainability of the MFI.
Targeted customers	Very poor ($1/day)	Micro-entrepreneurs close to the poverty line ($2/day)
Type of institutions	Social bonds	Commercial contracts
Methodology	Resort to subsidies	Financial self-reliance
Criticisms	- Sustainability issue - High operation costs - Various impact measurement methods - Failures (refunding rate < 50%)	- Customers selection bias (MFIs do not reach the very poor) - High interest rates - Long term self-reliance strategy
Common goal	Poverty alleviation	

Source: (Imene, 2009)

This research considered both the welferist and institutionist approach to assess the impact of microfinance institutions on poverty. Survey will be conducted to assess the changes in the income, asset and quality of life of the borrowers as stipulated by the welferists. Similarly, the study will analyze the outreach coverage, financing structure of microfinance institutions and profitability and sustainability indicators to evaluate the development of the microcredit market as indicated by the institutionalists approach.

Literature evidence also suggested that the tendency (efforts) to increase the financial sustainability of microfinance institutions through an increase in interest rate and tightening of the repayment schedule will undercut the number of users of microfinance.

For microfinance institutions to be financially sustainable on the other hand, they have to charge an interest rate that covers both inflation and the total cost. If microfinance is going to charge higher interest rate, the power of micro-credit to reduce poverty is very limited. Hence, if MFI objective is to reduce poverty they should charge reasonable interest what financial sustainability suggests.

Screening and monitoring in MFIs

There is a widespread agreement in the literature that effective, appropriate and active screening and monitoring by lenders and regulatory authorities are critical for the proper functioning of financial markets. The existence of information asymmetry and market imperfections in the financial market, particularly in banking made monitoring very difficult (SUZUKI, 2011). Lenders solvency is undermined by borrowers' defaulting on their promises to repay. Hence, credit markets (especially in the banking sector) are exposed to a systemic risk of potential contagious runs, which cannot be prevented and resolved by the ordinary auction market mechanism. The situation is still the same for microfinance institutions and microcredit market as a whole. The sustainability and efficiency of the microfinance institution greatly depend on the methods and strategies

of credit risk management system they used. The absence of physical collateral in the microfinance credits, the relatively limited knowledge and monitoring capacity of rural microcredit institutions makes monitoring activities very difficult. However, microfinance institution's such as the Grameen Bank of Bangladesh come up with a viable screening and monitoring system which is referred as "the Grameen mode of monitoring and supervision" that is currently being used by most microfinance institutions in the world including Ethiopia. Following this, literature evidences on the screening, monitoring and supervision of the Grameen Bank model and how this system helped to overcome the monitoring problem will be discussed.

The Grameen Bank Model

The Grameen Bank in Bangladesh has achieved high repayment rates on small uncollateralized loans. Its lending scheme is very popular among governments and international agencies, and has been replicated all over the world (Morduch, 1999). According to SUZUKI, et.al, effective screening and monitoring of the borrowers is a vital ingredient for the optimal allocation of scarce financial resources, and this model helped the bank to reduce the transaction cost of screening and monitoring in all the

three stages as ex-ante, ongoing and ex-post stages. Group loans were first popularized by the Grameen Bank of Bangladesh in the 1970s. It was believed that joint liability would generate social pressure on borrowers to repay loans and create a financially sustainable model of lending. In addition, joint liability loans induce borrowers to provide mutual assistance in hard times. (SUZUKI et.al, 2013)

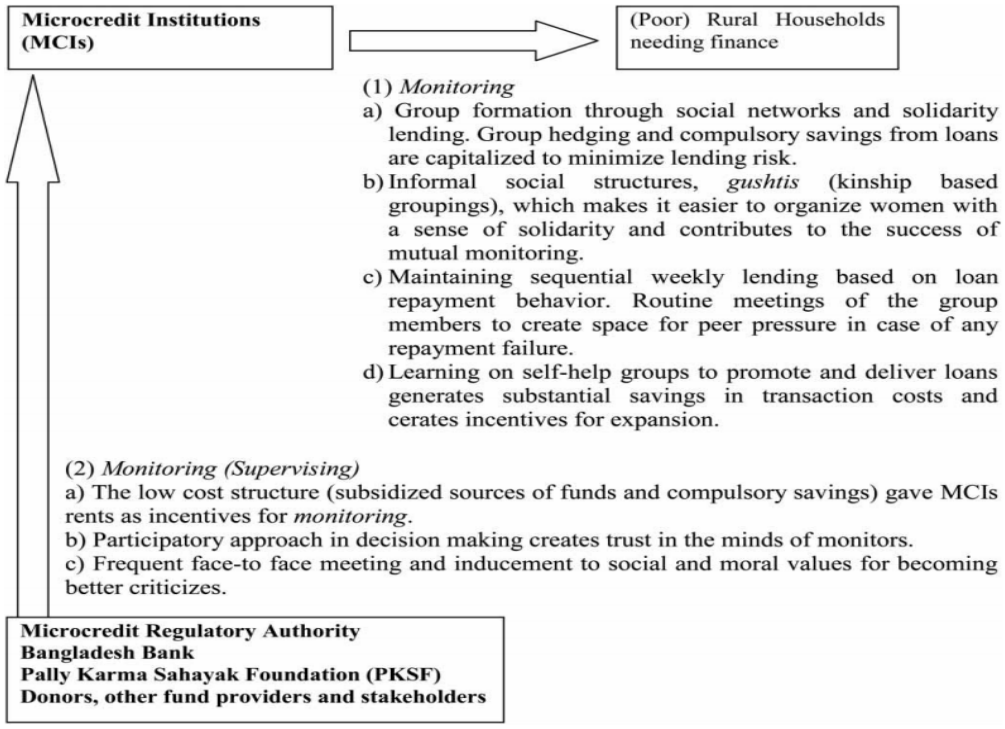

Figure 3. Supervising and monitoring system of the GB.

Source: (SUZUKI et.al, 2013)

A bank unit is set up with a Field Manager and a number of bank workers, covering an area of about 15 to 22 villages. The manager and workers start by visiting villages to

familiarize themselves with the local milieu in which they will be operating and identify prospective clientele, as well as explain the purpose, functions, and mode of operation of the bank to the local population. Groups of five prospective borrowers are formed; in the first stage, only two of them are eligible for, and receive, a loan. The group is observed for a month to see if the members are conforming to rules of the bank. Only if the first two borrowers repay the principal plus interest over a period of fifty weeks do other members of the group become eligible themselves for a loan. Because of these restrictions, there is substantial group pressure to keep individual records clear. In this sense, collective responsibility of the group serves as collateral on the loan. The small size of the group, consisting of only five members, may contribute to screening out potentially bad borrowers, and peer pressure also makes the repayment more likely. In principle, the GB does not extend any further credit to a group in which a member has defaulted. So in cases of failure of repayment, the group members are often seen contributing to repay the default with the intention of collecting the money from the defaulting member at a later time. (grameen.com)

The bank established a chain of supervising responsibilities at different hierarchical levels to ensure that information is properly maintained about each member of the

borrowing groups. This continuous monitoring usually in the form of meetings with clients can help the bank to reduce default rate and also enable them to keep the monitoring costs as minimum due to the fact that the group itself becomes a monitoring and overseeing agent.

The other important aspect Grameen Bank used is the introduction of compulsory savings made by the borrowers on the weekly basis. Unlike other microfinance institutions such as in Ethiopia, Grameen bank shows a successful progress in mobilizing deposits from its customers. These deposits could serve as a guarantee to its loans and also becomes a source of income to the bank. Grameen bank covers large share of its outstanding loans from the funds collected through deposit and also subsidies its operations by the revenues obtained from time deposits (SUZUKI et.al, 2013).

When it comes to the Ethiopian microfinance institutions, a similar group lending and monitoring and supervision practices are widely used in combination with individual loans. Even though the Grameen mode is adopted in the country, its success is relatively limited compared to the Grameen Bank of Bangladesh. According to the information the

researcher got from interview, side agreements among group members made the monitoring very difficult and less willingness from the performing members to support the default one also contributed a lot for the successful replication of the Grameen mode.

Research Questions and Hypothesis

The research is aimed at providing answer to three fundamental questions at the end of reviewing the various factors and variables that can determine the impact of microfinance institutions on poverty alleviation. The methodology deployed to answer the research questions will be discussed in the following chapter.

1. How do the Ethiopian MFIs perform in the last decade to reach to the poor and support the country's poverty reduction effort?
2. Are the MFIs in Ethiopia sustainable/prudent enough to guarantee a stable credit market and how is their performance compared with the MFIs in other countries?
3. How is the reaction of beneficiaries of the MF program?how is the real impact of reducing poverty level at the household sector?

In the process of finding answer to the above three basic research questions the research supposed to prove or disprove the following two hypothesizes mainly related with

microfinance institutions impact on poverty supported by related literatures.

1. MFIs in Ethiopia are sustainable enough to facilitate the financial intermediation and support the poverty alleviation effort in the country
2. Participation of clients in microfinance program would bring about significant reduction in the level of poverty.

CHAPTER III

3.1 METHODOLOGY

For this study, a mixed method approach has been used where by primary and secondary data are gathered. The researcher used different sources to collect data by classifying it in to two sets as supply side and demand side of the microfinance market.

3.1.1 Supply Side:

The supply side or the institutionalists view refers to the microfinance institutions. As it has been indicated in the literature review part, the proxy variables commonly used to measure the real impact of microfinance institution in poverty alleviation are collected from microfinance institutions themselves. In this regard, the methodology adopted considered a 12 year data to conduct a time series analysis on the performance of the Ethiopian microfinance institutions. In addition to that, data has been collected from various sources on the African microfinance institutions average performance and Grameen Bank of Bangladesh to get a comparative analysis and determine the relative development of microfinance market in Ethiopia.

The data collected mainly focused on three important aspects of a microfinance

industry;

1. *Outreach indicators:* refers to those aspects that determine the total number of poor clients served by the microfinance industry, the percentage share of women borrowers, the total outstanding loan balance, average loan balance per borrowers and the total amount collected in the form of deposit. These variables are believed to show how much the microfinance industry is developed and indicate if they reached to the demanding poor and the trends of coverage through time.
2. *Financing structure indicators:* refers to the balance sheet structure of microfinance institutions and mainly measure the financing sources, solvency and liquidity aspects and composition of the liability portion of the balance sheet. In this part, the capital to asset ratio, debt to equity ratio, deposit to loan ratio, deposit to total asset ratio, portfolio to asset ratio and other indicators are considered.
3. *Financial performance indicators:* refers to the profitability and degree of risk (asset quality) measures. The financial performance of microfinance institutions would be measured by looking in to ROA, ROE, portfolio at risk (PAR) and other indicators.

3.1.2 Demand Side

The demand side or the welferists view refers to the clients of microfinance industry. The methodology used to address the third research question with regard to clients satisfaction and measuring the impact of the microfinance program from the users view point conducted using a structured questionnaire. In this regard, the researcher developed a questionnaire (Anex …) and distributed it to get data from the MFI customers.

3.2 Population

As it has been indicated in the historical background part, the total population (in terms of MFIs) or the total players in the microfinance market in Ethiopia are 33 in number. These institutions differ in size, age, provision of microfinance products and many other measures. Prior to the sample selection, the total population together with the number of years they stayed in the operation and respective active number of borrowers together with their outstanding loan balance in Ethiopian currency (1 USD = 21 Ethiopian Birr) is presented in the following table.

No	MFIs	Age	Outstanding loan in Ethiopian Birr	No of active borrowers
1	Tesfa	1	203,601	64
2	Nisir	3	368,560	126
3	Adaday	1	224,589	36
4	Rays	1	178,365	31
5	Gambela	1	217,568	115
6	Digaf	5	629,545	435
7	Lefaeda	6	1,163,524	325
8	Dynamic	6	1,036,501	152
9	Somale	3	126,291,890	1,499
10	Lideta	2	4,450,818	1,273
11	AVFS	10	25,192,831	12,712
12	Harbu	8	60,927,711	21,274
13	Letta	9	17,080,979	2,312
14	Meklit	13	44,764,605	10,459
15	Metemamen	11	35,937,027	14,352
16	Shashemene	12	20,096,756	2,244
17	Harar	8	46,456,491	6,768
18	Dire	12	68,348,082	4,483
19	Gasha	15	28,350,935	4,825
20	Aggar	9	69,444,726	7,102
21	PEACE	14	83,801,567	22,935
22	Eshet	14	65,610,607	22,297
23	Benishangul	12	114,957,237	44,785
24	BuusaaGonofaa	14	191,002,713	79,379
25	SFPI	14	140,984,345	35,943
26	Sidama	13	102,166,408	31,484
27	Wasasa	13	238,820,224	65,768
28	Wisdom	14	383,459,929	63,024
29	ACSI	18	5,875,241,345	880,606

30	ADCSI	16	1,524,462,245	204,468
31	DECSI	18	3,564,333,126	380,356
32	OCSSCO	18	2,901,898,049	724,802
33	OMO	18	1,944,344,190	512,450
	Total		**17, 682,447,089**	**3,158,884**

Table 3 Microfinance institutions operating in Ethiopia as of June, 2014

3.3 Sampling design: Sampling frame, sample size and Sampling technique

From the total population size of (33 microfinance institutions operating in Ethiopia) the study focused on few very strong and large sized MFIs. As we can see from Table 3.1 above, most MFIs are too small in size to influence the result of the survey. Besides that, most microfinance institutions are relatively new and do not satisfy the data requirement to review the trend of the industry for the last 12 years. In this regard, the researcher considered the market share possession of MFIs in relation with outstanding loans and number of active borrowers being served as a parameter to select sample institutions for the study. The following factors are considered while determining the sample MFIs;

- MFIs that stayed in the market for at least 12 years as the study planned to consider 12 years of data, (from 2002-2014)
- MFIs with a reasonable amount of outstanding loan size. The peer group classification adopted by the Association of Ethiopian Microfinance Institutions

(AEMFI)

- MFIs with reasonable outreach coverage in terms of number of borrowers.

Sample size for this study is determined on the basis of peer grouping methods used by the Association of Ethiopian Microfinance Institutions (AEMFI) and the National Bank of Ethiopia (NBE) on the basis of size of the institutions. The commonly used parameters for classifying MFIs as small, medium or large include asset size, gross loan portfolio and number of active borrowers is applied in this study to determine sample MFIs for the study.

Category	Definition	MFI under this category
Small	MFIs with Gross Loan portfolio of less than or equal to $10 Million	Degaf, Lefayeda, Dynamic, Somali, Ledeta, AVFS, Harbu, Letta, Meklit, Metemamen, Shashemene, Harar, Dire, Gasha, Aggar, PEACE, Eshet
Medium	MFIs with gross Loan Portfolio between $10 million and $30 million	Benishangul, BuusaaGonofa, SFPI, Sidama, Wasasa, Wisdom
Large	MFIs with Gross Loan portfolio greater than $30 million	ACSI, ADCSI, DECSI, OCSSCO, OMO

Based on the above category definition used by AEMFI, the five big MFIs which have operating experience of more than 12 years (All of them have more than 16 years of age), having a relatively very large gross loan portfolio and number of active borrowers are selected to serve as a sample. (Ethiopian Birr)

No	MFIs	Age	Outstanding loan	No of active borrowers
1	ACSI	16	5,875,241,345	880,606
2	ADCSI	14	1,524,462,245	204,468
3	DECSI	16	3,564,333,126	380,356
4	OCSSCO	16	2,901,898,049	724,802
5	OMO	16	1,944,344,190	512,450
	Total		**15,810,278,955**	**2,702,682**
% share from the total market			**89.4%**	**85.6%**

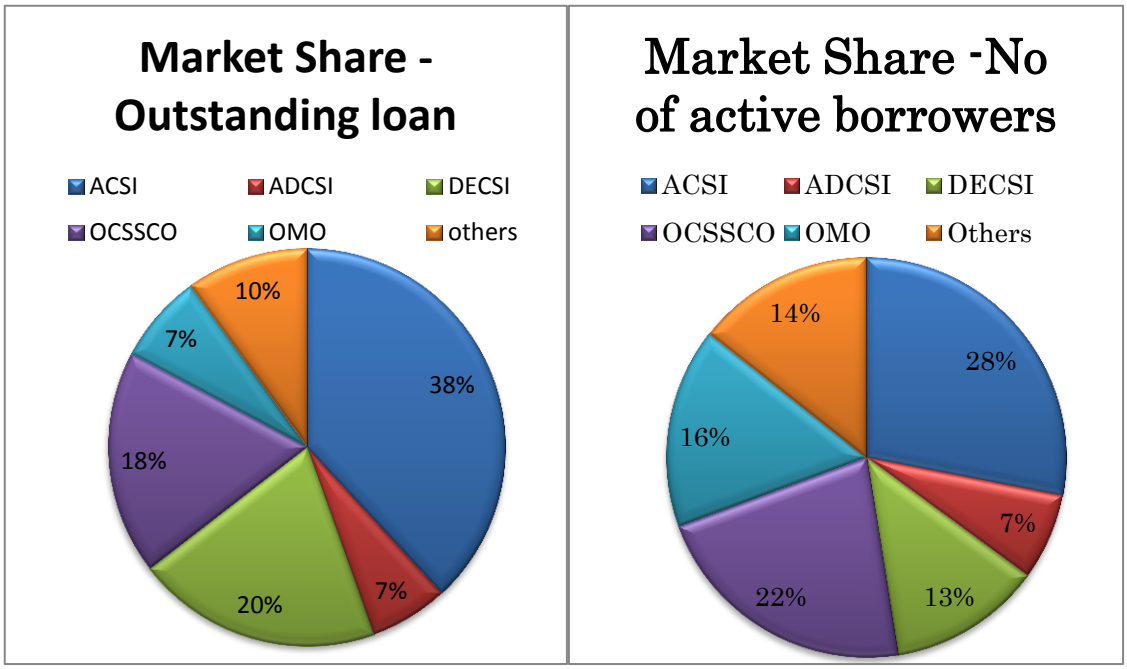

Figure 1 market shares on the basis of outstanding loan and number of active borrowers

The overall Microfinance industry has a total asset of 17,682,447,089 and from which the selected five big microfinance institutions account 15,810,278,955 that is 89.4%. Moreover, the five big microfinance institutions selected for this research accounts 85.6% of the total number of active borrowers currently being served by the Ethiopian microfinance institutions.

3.3 Performance comparison:

The research also considered selection of other country's microfinance institutions and markets for comparison. In this regard, the following two MFIs are selected for

comparison;

African MFIs average: taking in to account similarity of the economic situation, the poverty level and focus on the microfinance institutions development, African MFIs average performance could serve as a better indicator to determine the status of Ethiopian MFIs.

Grameen Bank of Bangladesh: in most literatures, Grameen Bank has been considered as the most successful and model MFI. The bank has won several awards and its business model is used as a benchmark for MFIs in most part of the world. Grameen Bank as an institution operating in relatively same economic environment and poverty level, has many lessons to teach to the Ethiopian MFIs. In this regard, though the level of development and performance of Grameen Bank seems very superior and incomparable with the Ethiopian MFIs, the study considered it as a performance comparison "standard" to determine the level of Ethiopian MFIs.

3.4 Method of Data collection

The required data for the research has been collected from microfinance institutions themselves or the supervisory body in the form of financial statements and annual

reports. Data on African microfinances average performance obtained from MIX MARKET data service. Data about Grameen Bank of Bangladesh collected from the Bank's official website and MIX MARKET database.

Data on the demand side is collected based on random sampling where by the researcher distributed 12 questionnaire for each of the five selected institutions and a total of 60 questionnaires from all the selected samples. Data is collected from users of microfinance in a random basis.

CHAPTER IV: DATA ANALYSIS AND PRESENTATION

4.1 Outreach Indicators

Outreach is a very important indicator to understand the ability of microfinance institutions to penetrate to the poor. Microfinance institutions contribution on the overall poverty reduction can be seen from the perspective of the scope of outreach by measuring the number of poor clients they have reached. In this regard, this section analyzes the number of active of borrowers being served by MFIs, percentage share of women borrowers, the total volume and growth of outstanding loan, the size and growth trends of average loan size per borrower and deposit mobilization capacity and trend of microfinance institutions selected for the study.

4.1.1 Number of Active Borrowers

As a measure of outreach, number of active borrowers indicates the level of performance as to how microfinance institutions are reaching to the needy poor. In Ethiopia, it is estimated that 13 million poor people needed to get access to microcredit service (MoFED, 2010).

Year	Number of Active borrowers	
	Ethiopian MFIs	Grameen Bank
2002	608,783	2,080,000
2003	704,106	2,870,000
2004	839,937	3,700,000
2005	1,033,554	5,050,000
2006	1,277,152	5,960,000
2007	1,488,757	6,160,000
2008	1,790,697	6,210,000
2009	1,924,368	6,430,000
2010	2,055,726	6,610,000
2011	2,221,591	6,580,000
2012	2,397,545	6,710,000
2013	2,666,259	6,740,000
2014	2,976,574	

Table 4 Number of Active borrowers

(own competition)

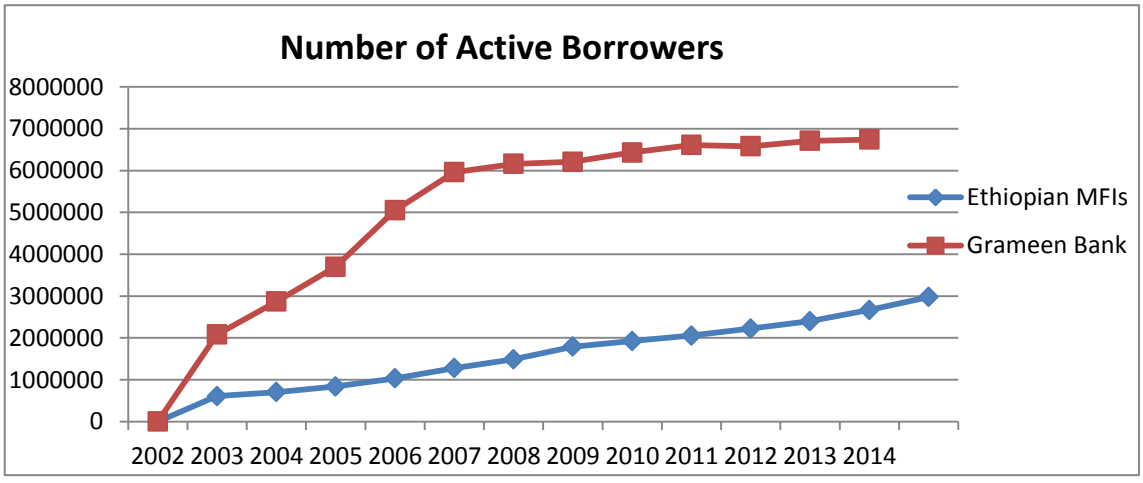

Figure 2 Number of Active borrowers

The above data presented in tabular form and the graph shows that the number of active

borrowers being served by the Ethiopian microfinance institutions is growing from the year 2002-2014. Data evidence show that the growth in the number of active number of borrowers despite the country's poor communication facilities, under developed infrastructure, weak legal system and limited technical capacity is in an encouraging trend. On the other hand, when we see the performance of Grameen Bank in the same parameter (number of active borrowers), it is by far higher than the sum of the five big MFIs in Ethiopia. The difference in the population size and availability of loanable funds could be sited as one of the reasons that created a performance variance between these two players.

4.1.2 Percentage of Women Borrowers

There are literature evidences that women are facing greater difficulty in accessing financial services than men. In this regard, number of women being served is used as a proxy measure to determine whether microfinance institutions are focusing on the real poor. Navajaset. Al, 2000 describe that there is a tendency by microfinance institutions to focus on relatively better poor (just above the poverty line) to secure repayment and neglect the poorest of the poor. For that, number of women borrowers being served can be used as an indicator of targeting the poorest (Navajas, 2000).

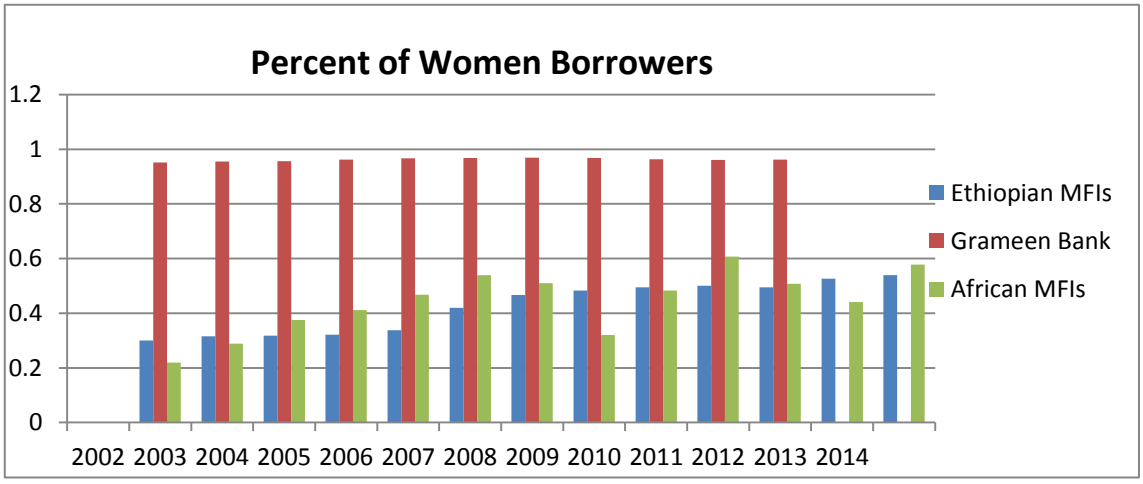

Figure 3 Percentage of Women borrowers

As we can see from the above chart, the Ethiopian MFIs percentage share of women borrowers is growing over time. The performance is almost the same with the African median microfinance institutions performance. The National Bank of Ethiopia (NBE) as regulatory institution encourages microfinance institutions to focus on women. Grameen Bank of Bangladesh, from the beginning focused on women economic empowerment and above 95% borrowers are female. Literature evidence show that women are more reliable customers and the repayment rate is very high compared to men.

4.1.3 Deposit;'

As part of the small and micro enterprise development strategy of the government, Ethiopian MFIs has given a huge emphasis on savings mobilization and changing the saving behavior of households. All Ethiopian MFIs offer saving services. The

deposit/savings collection performance indicates how much the poor are accumulating assets as the result of participating in the program and an important indicator of microfinance impact on poverty reduction (Ledgerwood J. , 2002).

Various studies indicate that the old notion saying “the poor have nothing to save” is not right and many MFIs in the world including Grameen Bank has shown that the poor can save if access to the service is granted. Savings can help households to build up assets to use as collateral, it can also help them better smooth seasonal consumption needs, finance their regular expenditures and self-insure against major shocks such as crop failure, old age, disability etc. Research also reveals that the large majority of poor savers lack access to safe and sound institution for depositing their savings. MFIs need to provide micro-saving to enable poor and low-income people to store their money safe and give them the possibility to earn a return on savings (Ledgerwood J. , 2002). We can distinguish two types of savings as compulsory savings and voluntary savings.

When we see savings/deposits from the perspectives of suppliers (MFI side), deposits provide a relatively stable source of funds that could enable an MFI to become sustainable. Savings is less expensive than commercial debt; (as saving helps to procure

funds at a reasonably lower cost and relatively stable than commercial debt) it also improves the organization's client outreach by offering products and services that meet the need of a wide range of market segments. Below, data on the deposit mobilization performance of the Ethiopian MFIs, African MFIs and Grameen Bank of Bangladesh from the year 2002 -2014 is presented. Savings data on Grameen Bank before the year 2005 cannot be obtained and not included.

Year	Deposit (in million USD)							
	ACSI	ADCSI	DECSI	OMO	OCSSCO	Total	Grameen Bank	Africa (Median)
2002	10.85	0.29	8.20	0.00	0.00	19.35	0.00	0.14
2003	14.59	1.36	14.89	0.00	2.30	33.14	0.00	0.27
2004	20.12	3.10	17.90	0.00	8.13	49.26	0.00	0.34
2005	27.46	3.86	21.78	4.00	13.05	70.15	306.21	0.52
2006	41.61	4.52	22.87	5.71	19.20	93.92	396.03	0.53
2007	61.54	5.98	32.90	8.39	25.20	134.02	433.45	0.87
2008	83.37	6.98	39.98	11.25	33.68	175.25	934.10	0.97
2009	78.24	8.24	41.84	14.32	39.14	181.77	1,208.57	0.96
2010	70.27	11.31	45.87	18.35	45.13	190.93	1,486.53	1.08
2011	101.34	12.97	51.21	21.63	52.57	239.71	1,436.98	1.31
2012	123.81	19.25	67.92	28.61	68.47	308.06	1,647.50	1.27
2013	182.97	26.42	88.15	34.72	81.34	413.59	1,921.93	2.38
2014	258.68	36.68	111.27	44.13	92.43	543.19	2,178.23	3.01

Table 5 Deposit in million USD

((Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

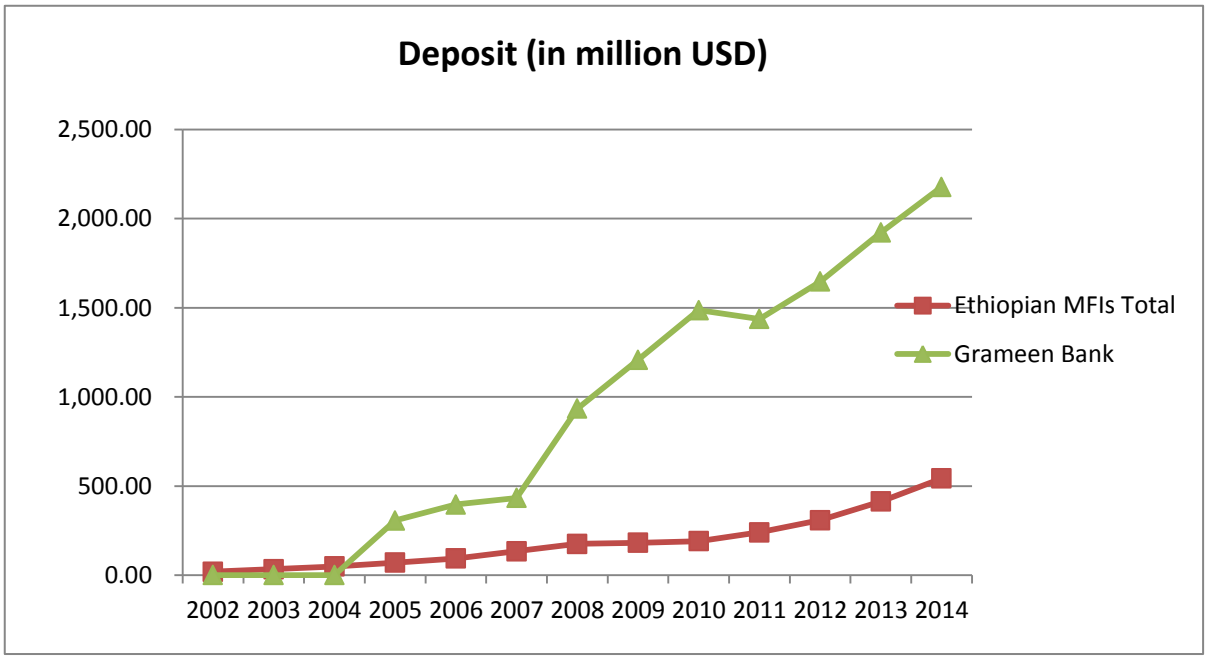

Figure 4 growth in deposit Ethiopian MFI and Grameen Bank

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

From the above data and graph, we can see that the deposit/savings mobilization performance of the Ethiopian MFIs shows a slightly increasing trend over the time but still above the African MFIs median performance. Grameen Bank's outstanding performance in deposit collection seems not comparable. Considering the deposit mobilization performance as a measure of outreach, the Ethiopian microfinance institutions have to work more on that and increase their reliance on funds raised through deposit.Deposit accounts 45.45% of the total asset in the Ethiopian MFIs in the year 2013 while GrameeBank's deposit takes 86.84% of total asset in the same year. Previous studies indicate that the lower performance in deposit collection by the

Ethiopian MFIs may be the result of very low return on borrower's business, lack of surplus assets to save and limited expansion of borrows business due to small loan size (Wolday A. , 2012)

4.1.4 Gross Loan Portfolio

The gross loan portfolio/outstanding loan balance is an important indicator of outreach by measuring the availability of loanable funds and its distribution to the needy poor people over time. How much money is given to customers in the form of microcredit can show the extent to which MFIs are working towards making the required finance available to the poor. The following table summarizes the US dollar equivalent amount of gross loan portfolio of the Ethiopian MFIs, the Grameen Bank of Bangladesh and African MFIs median.

Outstanding loan (in million USD)

Year	ACSI	ADCSI	DECSI	OMO	OCSSCO	Average	Total	Grameen Bank	Africa (Median)
2002	18.39	1.05	13.32	2.01	7.15	8.38	41.92	213.44	0.50
2003	23.85	4.78	23.17	3.53	10.14	13.09	65.47	268.03	0.62
2004	36.42	13.36	46.37	4.42	15.62	23.24	116.18	337.70	0.88
2005	51.26	13.90	77.92	8.77	25.00	35.37	176.85	424.47	0.87
2006	78.20	19.64	85.27	12.88	47.47	48.69	243.46	482.09	0.94
2007	110.59	24.16	118.77	20.42	52.46	65.28	326.40	532.02	1.58
2008	155.67	28.80	145.83	27.04	62.64	83.99	419.97	642.26	1.82
2009	131.18	25.50	107.61	36.81	76.35	75.49	377.46	817.39	1.52
2010	108.20	31.21	116.29	43.83	84.73	76.85	384.26	939.13	1.49
2011	169.65	32.17	120.42	46.30	95.89	92.89	464.43	920.69	1.81
2012	194.58	36.85	127.99	48.82	107.86	103.22	516.11	1,007.99	1.85
2013	233.15	41.83	138.20	51.20	118.31	116.54	582.69	1,091.74	3.19
2014	287.25	48.35	150.62	55.14	137.52	135.78	678.89	1,122.45	3.94

Table 6 outstanding loan (in million USD)

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

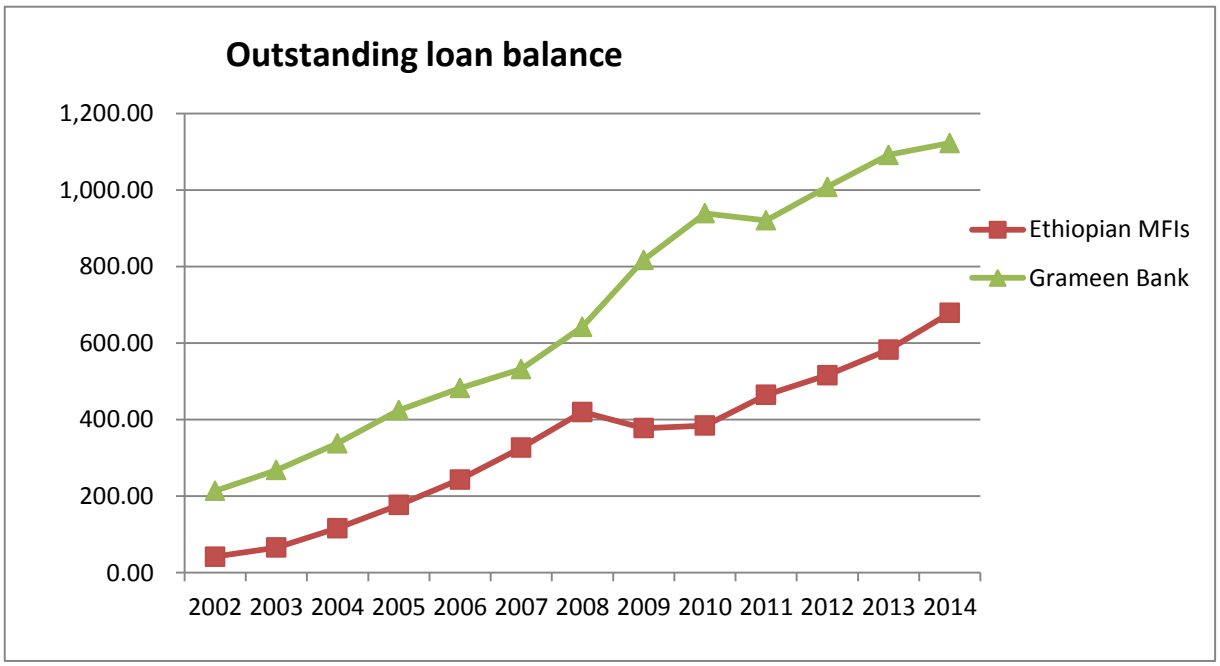

Figure 5 outstanding loan (in million USD)

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

Outstanding loan balance in the Ethiopian MFIs grows rapidly (284% from the year 2005-2014). The growth rate seems reasonable compared to 164% for Grameen Bank and 356% in African MFIs median. The steady growth in the outstanding loan balance indicates that microfinance institutions capacity to reach to more poor people has been increased over the time under consideration.

4.1.5 Average loan per borrower

Average loan balance per borrower is another indicator on the relative volume of money being supplied to an average borrower. Microfinance institutions provide loan for individual borrowers or a group of borrowers who run a small or micro business enterprise. The loan balance is determined on the basis of various factors such as; feasibility/profitability of the business, the balance of compulsory deposit and previous repayment performance history. Most microfinance borrowers complain that the amount of money supplied as a loan is very small to start and run a business as surveyed through questionnaire. Comparison of average loan size per borrower data is presented in the table under.

	Average loan balance per borrower	
Year	Ethiopian MFIs Average	Grameen Bank
2002	71	103
2003	100	93
2004	147	91
2005	168	84
2006	194	81
2007	223	86
2008	239	103
2009	195	127
2010	192	142
2011	206	140
2012	210	150
2013	215	162
2014	224	

Table 7 Average loan balance per borrower

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

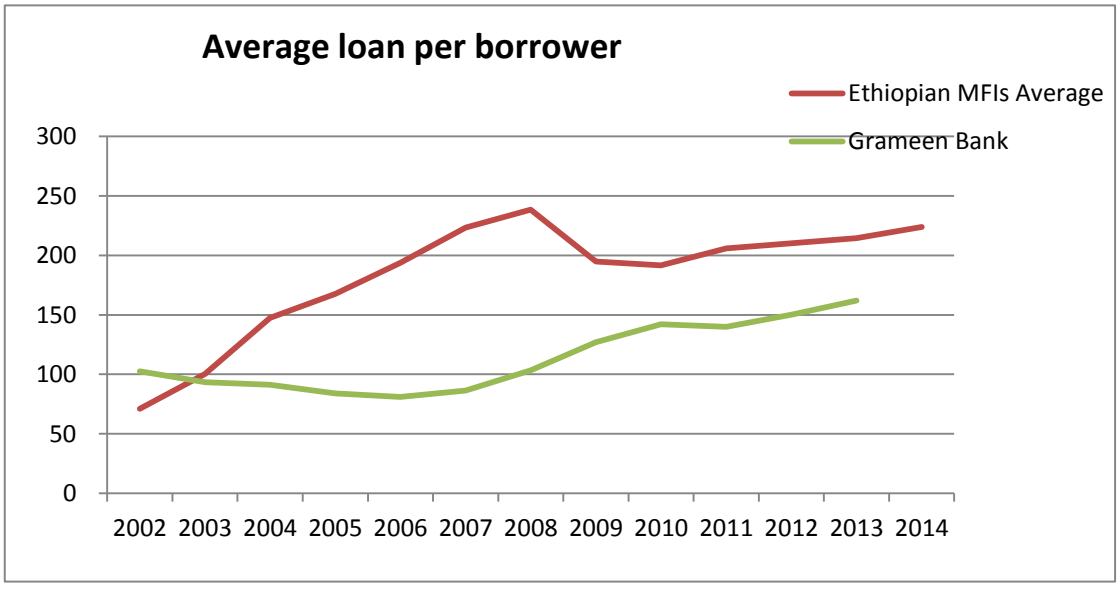

Figure 6 Average loan balance per borrower

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

The above table and the corresponding graph show that the average loan balance per borrower in the Ethiopian MFIs is relatively higher than the Grameen Bank.According to one of the presidents of MFIs, the higher average loan per borrower in Ethiopia seems very high as the loan provided to medium scale enterprises is relatively high and push up the average figure. This implies that the Ethiopian MFIs hesitate to undertake the credit risk of microenterprises and individuals in comparison with the Grameen Bank.

4.1.6 Summary of findings on Outreach indicators

Outreach indicators are a methodological approach used to answer the first research question as to the scope, coverage and reach of MFIs to the poor household and the extent to which the microfinance market in Ethiopian has been developed. In this regard, the following summary of findings is obtained from the data analysis conducted above.

i. ***Gross loan portfolio:*** data evidence show that the Ethiopian MFIs has shown a significant growth of 284% in the last 12 years with a compatible rate with African MFIs average of 356% and well above Grameen Bank 164%. The conclusion from this could be that the total amount of money provided as microcredit to the needy customers indicated that the MF industry in Ethiopia is growing.

ii. ***Number of Active borrowers:*** data evidence show that the numbers of active borrowers being served by the Ethiopian MFIs significantly grow in the last decade (a 390% growth from the year 2002 to 2014). On the other hand, Grameen Bank's numbers of borrower's coverage grow 224%. When we see the overall performance, Grameen bank alone served a total of 6.7 million customers while the sum of the big five Ethiopian MFIs is only 3million. Even though the growth rate is relatively higher, the Ethiopian MFIs should work more to reach the target potential market with 13million customers.

iii. ***Percentage share of Women Borrowers:*** from the data analysis presented with respect to women borrowers, the Ethiopian MFIs focus on women is limited. Grameen bank from the beginning has focused on female borrowers and the performance between the two is really incomparable.

iv. ***Deposit mobilization:*** the Ethiopian MFIs performance in deposit collection is relatively low. The total sum of deposits collected by the big five Ethiopian MFIs reached 543million while Grameen Bank alone has a total deposit of 2.2billion. In this regard, the performance of the Ethiopian MFIs is lower and needs a better strategy to increase.

4.2 Financing Structure

Literature on microfinance provide due attention on the process of transformation of MFIs from relief related schemes (NGO based) to a licensed and regulated financial institution. In this process the structure of financing has been also transformed in to the traditional equity financing and collection of deposits from customers. Licensed and regulated microfinance institutions can also have access to commercial credits.

Most of the Ethiopian MFIs started their activities as NGOs with an entirely social vision and funded their operations through grants and concessional loans from donors. The government and international and local NGOs were the primary sources of funds for the MFIs. MFIs in Ethiopia have come under regulation of the National Bank of Ethiopia (NBE) which made them eligible for commercial funding. All of them can take public deposits from date of their commencement of operation. Besides, their share holding pattern is amenable for equity participation. Moreover, MFI liquidity and financial management improved as a result of deposit mobilization that led to an increase in overall profitability. This research focuses on the five performance indicators: Capital to Asset, Debt to Equity, Deposit to Loan, Deposit to Total Assets and Portfolio to Asset ratios.

4.2.1 Capital to asset ratio

The capital to asset ratio is a simple measure of the solvency of any financial institution. It is used to assess an MFI's ability to meet its obligations and absorb unexpected losses. For the regulated MFIs, there is a minimum solvency requirement stipulated by the regulator. According to the Consultative Group to Assist the Poor (CGAP), MFIs should be subject to even higher capital to asset ratio than banks in the light of risks and vulnerability of MFI loan portfolio. They further advise MFIs to maintain an average ratio of 20 percent (Moti, 2003).

capital to asset ratio			
Year	**Ethiopian MFIs**	**Grameen Bank**	**African MFIs**
2002	**49.70%**	**10.81%**	**36.72%**
2003	**51.18%**	**19.76%**	**36.40%**
2004	**41.60%**	**15.37%**	**33.25%**
2005	**36.12%**	**11.25%**	**27.14%**
2006	**34.07%**	**10.81%**	**26.79%**
2007	**34.44%**	**9.12%**	**26.66%**
2008	**31.45%**	**12.98%**	**27.55%**
2009	**35.43%**	**6.93%**	**27.51%**
2010	**31.31%**	**6.08%**	**25.18%**
2011	**30.81%**	**5.84%**	**22.13%**
2012	**28.03%**	**6.04%**	**26.70%**
2013	**25.74%**	**6.08%**	**26.82%**
2014	**23.92%**		**23.42%**

Table 8 capital to Asset ratio

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

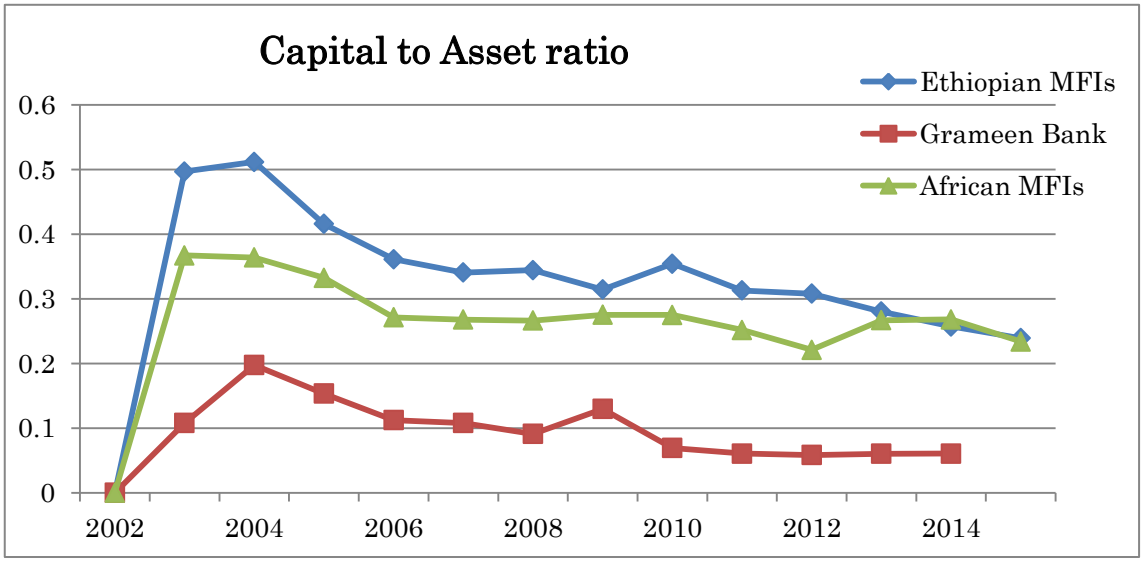

Figure 7 capital to asset ratio

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

As we can see from the data presented in Table 4.2.1 and the graph, the Ethiopian microfinance institutions maintain a very high and above the standard capital to asset ratio. The researcher learned from interview that the main reason for the Ethiopian microfinance institution to have such higher capital to asset ratio is the contribution of donor-equity to MFIs and the policy of the government that limits MFIs with social objectives and do not distribute dividends to shareholders. The financial structure comparison of the Ethiopian MFIs with that of Grameen Bank of Bangladesh and African MFIs average shows that the equity contribution of Ethiopian MFIs is better which makes them more resilient for unexpected shocks. In general, the Ethiopian and African MFIs have the ability and potential to absorb more credits and increase their

portfolio balance without being highly exposed to unexpected losses.

4.2.2 Debt to Equity (Leverage) Ratio

The debt to equity ratio is the direct reflection of the capital to asset ratio. Debt to equity ratio helps us to understand the capital adequacy as it measures the overall leveraging of microfinance institutions. Traditionally, MFIs have had a very low and minimum debt to equity ratio as they cannot get commercial credits from banks and cannot collect deposits due to their NGO nature. After they become a licensed financial institution and funded with traditional equity funding, their capacity to borrow from commercial sources and source funds from deposits increased which makes their debt to equity ratio relatively higher than before. The following table summarizes the debt to equity ratio of the Ethiopian MFIs, African MFIs average and Grameen Bank.

Year	Debt to Equity Ratio		
	Ethiopian MFIs Average	Grameen Bank	Africa (Median)
2002	1.47	8.25	1.38
2003	1.36	4.06	1.37
2004	1.98	5.51	1.90
2005	3.13	7.89	2.39
2006	3.26	8.25	2.42
2007	3.30	9.96	2.39
2008	2.97	6.71	2.20
2009	2.33	13.43	2.22
2010	2.63	15.44	2.48
2011	2.66	16.11	2.58
2012	2.86	15.57	2.34
2013	3.09	15.46	2.29
2014	3.34		2.82

Table 9: debt to equity ratio

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

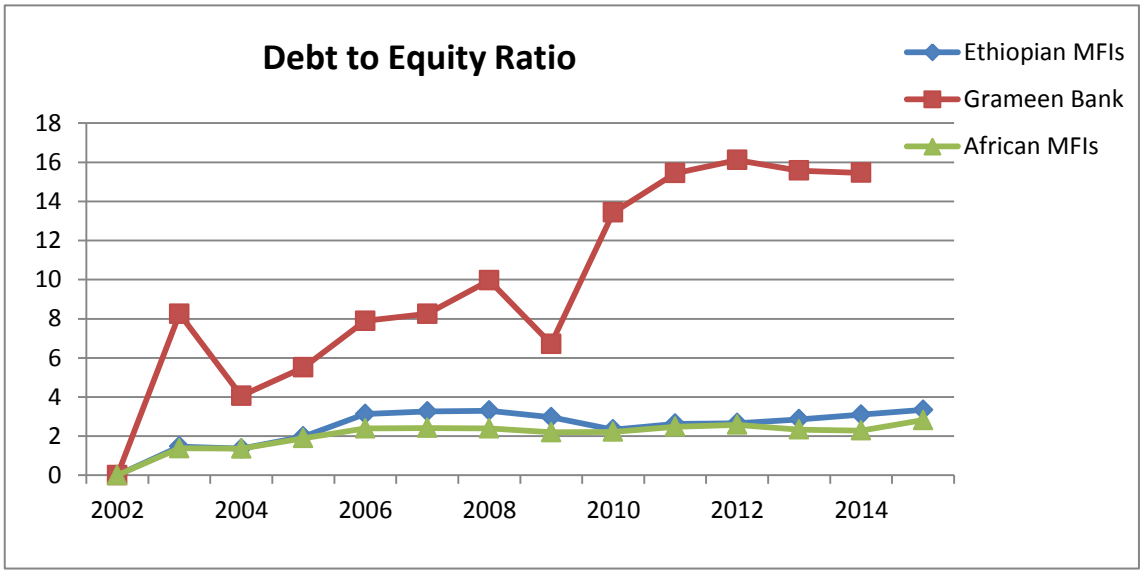

Figure 8 debt to equity ratio

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

The above graph shows that the Ethiopian and African MFIs average financing structure in terms of debt to equity is relatively lower than that of Grameen Bank. In other words, Grameen bank's debt position is much higher accompanied with a relatively very high deposit. Previous studies indicate that the Ethiopian MFIs depend more on NGO equity funding and less on commercial debt. Moreover, the deposit amount collected by Grameen Bank is so big to inflate the debt to equity ratio.

4.2.3 Deposit to loan ratio

The deposits to loan ratio is an important financial structure indicator for MFIs that mobilize deposits. It measures the portion of the microfinance institutions loan portfolio funded by depositors. The higher the ratio, the greater is the MFI's capacity to fund its loan portfolio from deposits. The higher deposit to loan ratio refers that MFIs can bring down the cost of funds and increase their reliability on internal funding. According to (Wolday, 2007), sustainability of MFIs greatly depends on their saving mobilization capacity.

Year	Deposit to Loan Ratio		
	Ethiopian MFIs Average	Grameen Bank	Africa (Median)
2002	29.68%		28.06%
2003	35.34%		42.55%
2004	33.83%		39.04%
2005	41.43%	72.14%	59.74%
2006	37.57%	82.15%	56.31%
2007	39.45%	81.47%	55.18%
2008	40.12%	145.44%	53.66%
2009	44.20%	147.86%	62.92%
2010	47.15%	158.29%	72.38%
2011	48.82%	156.08%	72.42%
2012	58.21%	163.44%	68.82%
2013	68.39%	176.04%	74.62%
2014	77.40%	194.06%	76.27%

Table 10 deposit to loan ratio

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

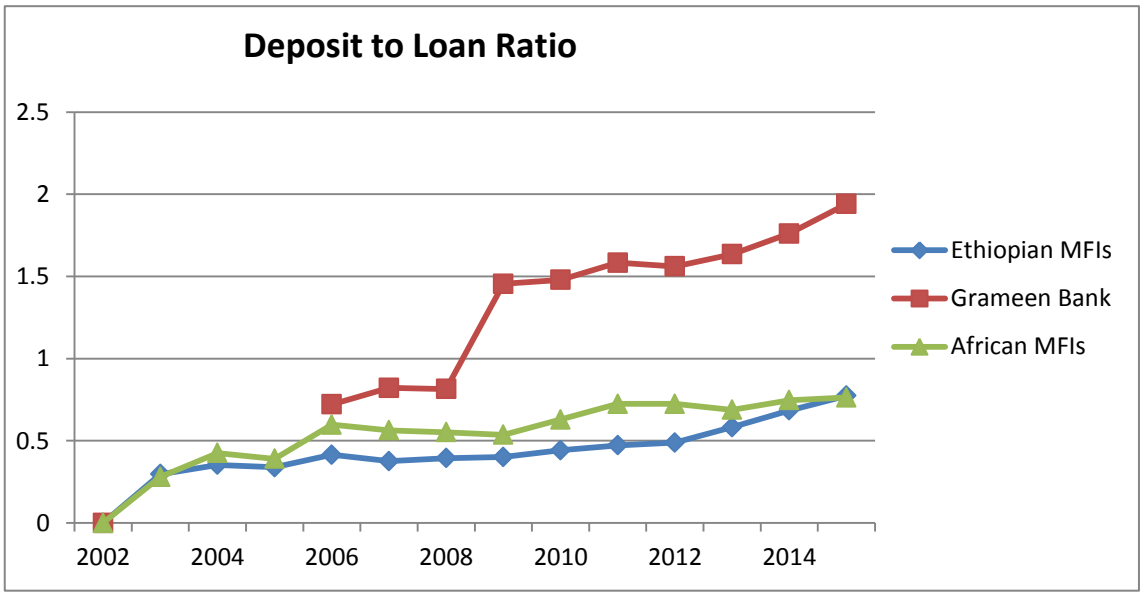

Figure 9 deposit to loan ratio

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

As we can see from the above table and graph, the deposit to loan ratio of the Ethiopian MFIs and African MFIs average performance slightlyincreased over time and reached over 50% in recent times. Grameen Bank on the other hand shows a great achievement in deposit mobilization and its deposit to loan ratio reached 200% in the year 2013. Grameen Bank's outstanding performance in deposit collection allows it to cover its outstanding loan to the full and contribute to the Bank's income generation by investing in to time deposits and short term securities as the cost of fund for deposits is minimal.

4.2.4 Portfolio to asset ratio

Loan portfolio is the only income generating asset for most microfinance institutions. The Ethiopian MFI's only means of income is the interest collected from loan unlike the Grameen bank that has various sources of income other than interest collected form loans to customers such as time deposit and investment in securities. According to AEMFI, 2012, the Ethiopian microfinance institutions are not allowed to engage in other type of income generating activities and remain focused on their development objectives through financial intermediation. The portfolio to asset ratio indicates that how much of the total asset hold by the MFI is transferred to the poor in the form of loan. Microfinance institutions, as development agents, are expected to focus more on

the loan provided to the poor than accumulating assets in the form of buildings, cars, land or any other form of fixed assets. In this regard, portfolio to asset ratio will help to evaluate the resource utilization capacity of MFIs and the extent to which the available funds are used to help the poor. The following table summarizes the portfolio to asset ratio from the year 2002-2014.

	Portfolio to Asset Ratio		
Year	**Ethiopian MFIs Average**	**Grameen Bank**	**Africa (Median)**
2002	**56.88%**	**67.61%**	**63.61%**
2003	**69.74%**	**68.02%**	**44.91%**
2004	**73.30%**	**65.61%**	**46.26%**
2005	**73.80%**	**67.05%**	**55.26%**
2006	**79.44%**	**58.81%**	**52.73%**
2007	**78.41%**	**56.52%**	**50.81%**
2008	**79.00%**	**57.46%**	**55.57%**
2009	**76.26%**	**57.91%**	**55.15%**
2010	**71.80%**	**54.81%**	**60.41%**
2011	**71.54%**	**55.90%**	**65.54%**
2012	**70.01%**	**53.04%**	**66.40%**
2013	**66.55%**	**49.33%**	**59.80%**
2014	**65.34%**		**61.30%**

Table 11 portfolio to asset ratio

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

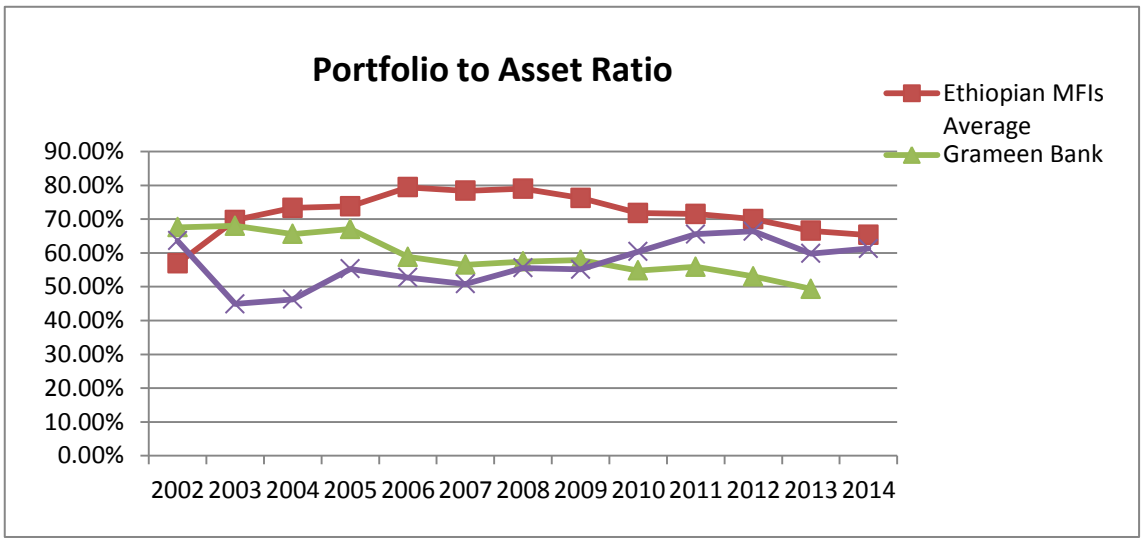

Figure 10 portfolio to asset ratio

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

The portfolio to asset ratio of the Ethiopian microfinance institutions is relatively higher than both the African MFIs average and Grameen Bank. The main reason can be that the Ethiopian MFIs are not allowed to engage in another income generating investments and just to focus on loan to the poor. The situation in the Grameen bank is different that the Bank invested in securities and time deposits and covers its operational expenditure and losses from the revenues generated from it which as a result pushed down its portfolio to asset ratio.

4.2.5 Summary of findings on financing structure indicators

i. ***Capital to asset ratio:*** data evidences show that the capital to asset ratio of the Ethiopian MFIs is well above 20% as suggested by the CGAP. The ratio is also

above African MFIs median and Grameen Bank. Donors' equity financing contributed a lot for the increase in the equity portion of the Ethiopian MFIs that leads to increase in the capital to asset ratio. From this we can conclude that Ethiopian MFIs are relatively better resilient for emerging shocks.

ii. ***Debt to Equity ratio:*** data analysis results show that the debt to equity ratio of the Ethiopian MFIs as an indicator of maintaining adequate safety cushion in the form of equity is the same as African MFIs median. Corresponding to the capital to asset ratio described above, relatively higher reliance on equity financing and lower performance in deposits contributed a lot on the Ethiopian MFIs to have lower debt to equity ratio compared to Grameen bank that have a very big deposit balance which inflated its debt to equity ratio.

iii. ***Deposit to loan ratio:*** data evidences show that the deposit to loan ratio of the Ethiopian MFIs is lower than Grameen Bank. The analysis goes with the deposit collection performance in which Grameen bank's outstanding loan is fully covered by the amount collected in the form of deposit. On the other hand, the Ethiopian MFIs and African MFIs cover slightly higher than 50% of their portfolio from deposits. To sum up, the Ethiopian MFIs have to improve their deposit collection performance and increase their reliance on low cost funds procured as deposits.

iv. ***Portfolio to Asset ratio:*** data analysis with respect to portfolio to asset ratio indicate that the Ethiopian MFIs is relatively higher than the African MFIs median and that of Grameen Bank. The analysis further goes to the operational rules of the countries under consideration where in MFIs in Ethiopia are not allowed to engage in investments other than microcredit while Grameen Bank generate revenue from operations other than credit such as time deposit and short term investments.

Financial Performance

The financial performance of MFIs is reviewed based on their ability to generate sufficient revenues from their loan portfolio in order to cover their financial and operating cost. Financial performance, such as return on assets and return on equity, and asset quality indicator – portfolio at risk (PAR) provide the financial performance indicators in all areas. This research reviewed the financial performance indicators of the Ethiopian microfinance institutions from the year 2002 – 2015 and tried to evaluate the overall profitability and sustainability aspects of the sector. Theories suggest that MFIs can successfully achieve their intended purpose of poverty reduction only if they are sustainable and profitable.

4.3.1 Return on Asset (ROA)

ROA measures how well the institution uses all its assets. It is also an overall measure of profitability, which reflects both the profit margin, and the efficiency of the institutions. ROA is a fairly straightforward measure which encompasses net income, primarily portfolio yield, cost of funds and operational efficiency.

Year	ROA		
	Average	Grameen Bank	Africa (Median)
2002	0.82%		-0.64%
2003	1.21%	0.77%	-0.60%
2004	2.12%	0.19%	0.57%
2005	2.37%	2.41%	0.41%
2006	2.67%	2.46%	0.66%
2007	3.19%	0.11%	0.84%
2008	3.60%	1.66%	1.08%
2009	3.39%	0.43%	0.35%
2010	4.24%	0.52%	0.68%
2011	2.61%	0.41%	0.83%
2012	4.14%	0.86%	1.00%
2013	4.18%	0.69%	0.77%
2014	4.25%		1.19%

Table 12 return on asset (ROA)

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

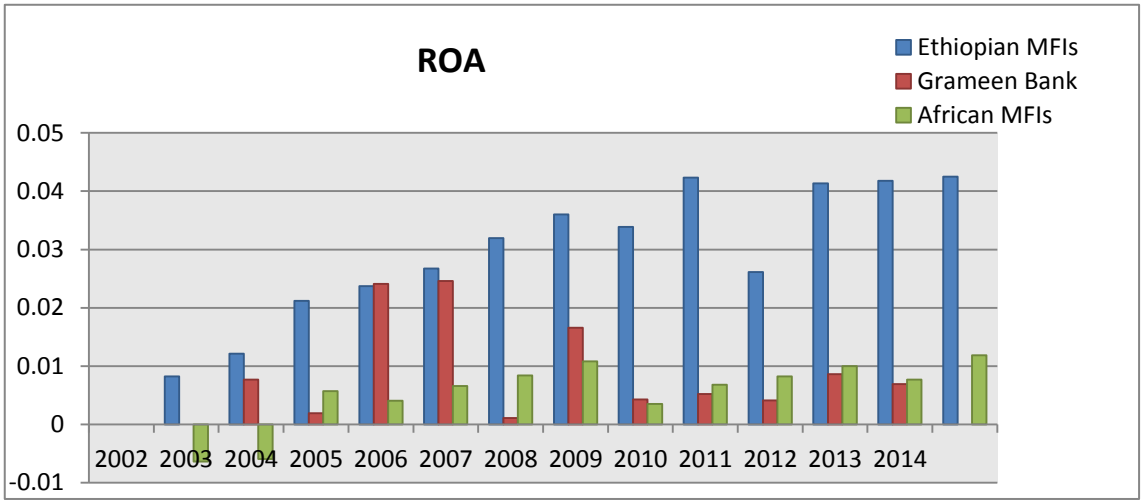

Figure 11 return on asset (ROA)

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

As indicated in the above table, the Ethiopian microfinance institutions have improved their efficiency through time and show a positive and increasing ROA from the year 2002 up to 2015. On the other hand, Grameen bank has a positive ROA all the time though it is less than the average ROA size of the Ethiopian MFIs

4.3.2 Return on Equity (ROE)

ROE indicates how much net income was earned on the equity invested by the shareholders and donors of an MFI. ROE is therefore of interest to existing or prospective shareholders and donors. ROE indicates net profit earned on invested equity while ROA indicates profit earned on total assets (equity + all other liabilities).

Year	ROE		
	Average	Grameen Bank	Africa (Median)
2002	1.80%		-0.49%
2003	2.55%	4.90%	-0.46%
2004	6.64%	1.07%	1.65%
2005	8.64%	18.40%	1.97%
2006	10.03%	22.37%	4.19%
2007	12.86%	1.07%	5.58%
2008	14.08%	14.78%	5.79%
2009	11.48%	4.45%	3.79%
2010	14.72%	8.04%	4.31%
2011	9.32%	6.82%	5.74%
2012	15.77%	14.51%	5.49%
2013	16.45%	11.36%	2.36%
2014	18.09%		6.93%

Table 13 return on equity (ROE)

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

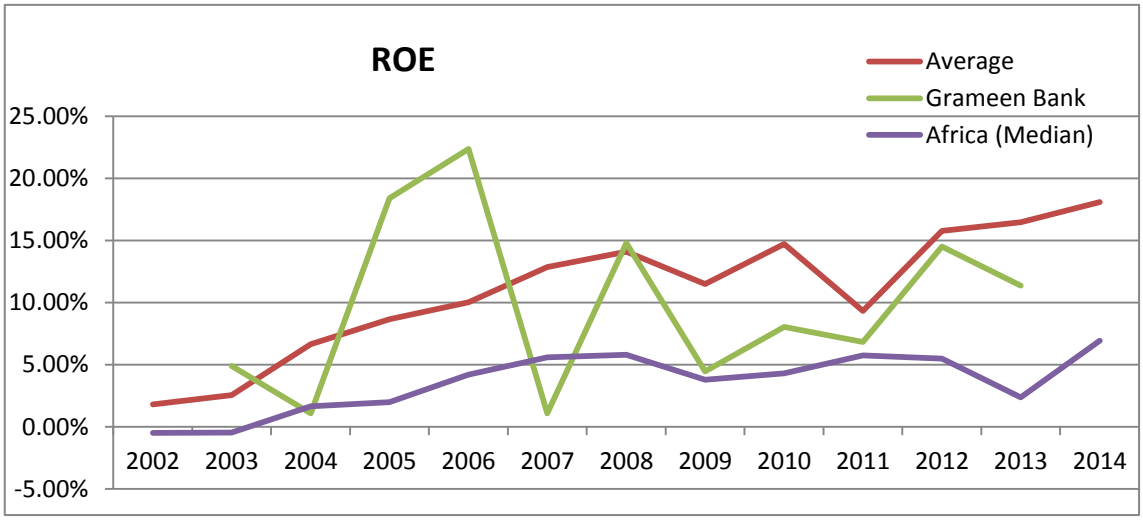

Figure 12 return on equity (ROE)

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

The ROE of the Ethiopian MFIs seems stable and growing over time well above African MFIs median and Grameen Bank of Bangladesh. The same as ROA, the interest rate being charged by the Ethiopian MFIs may be a factor contributing for the growth of ROE. .

4.3.3 Portfolio at risk>30 days

Portfolio at risk is an important indicator of asset quality and collection rate of microfinance institutions and can be considered as over 30 days, over 90 days or 180 days. The higher the percentage share of portfolio at risk indicates a problem and call for greater attention.

Year	Portfolio at Risk >30days		
	Average	Grameen Bank	Africa (Median)
2002	11.70%	18.41%	3.21%
2003	15.07%	6.98%	5.88%
2004	7.91%	7.98%	5.30%
2005	4.51%	7.78%	8.45%
2006	3.82%	7.02%	5.94%
2007	2.89%	0.00%	5.21%
2008	5.47%	6.21%	7.54%
2009	4.29%	6.57%	6.79%
2010	2.66%	6.95%	5.88%
2011	5.28%	8.76%	1.98%
2012	2.33%	10.66%	3.39%
2013	2.08%	9.94%	3.12%
2014	2.06%	1.04%	3.37%

Table 14 Portfolio at risk>30 days

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

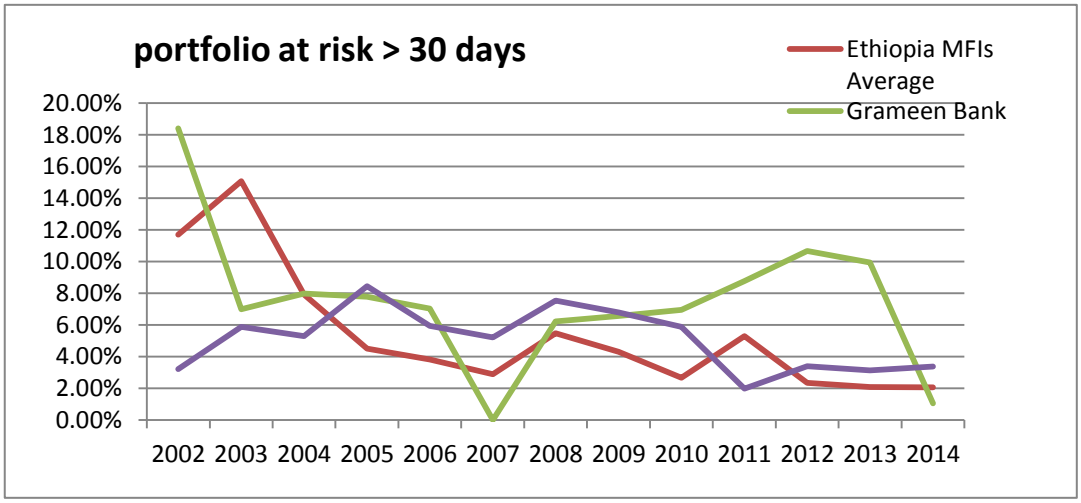

Figure 13: Portfolio at risk>30 days

(Source: NBE, AEMFI, MIX MARKET, grameenbank.org, own compilation)

As we can see from the above table, the level of portfolio at risk for all the three is showing a downward trend. The Ethiopian MFIs performance on the timely collection of the loan is even slightly better and kept under the regulatory requirement of not more than 10%.

4.3.4 Summary of findings on financial performance indicators

i. ***Return on Asset (ROA):*** data evidence show that the Ethiopian MFIs financial performance in relation with asset quality and operational efficiency as measured by the ROA is relatively higher than African MFIs median and that of Grameen Bank.

ii. ***Return on Equity (ROE):***from the data analysis presented above, how much profit is earned from the equity invested was measured through ROE and the result show that the Ethiopian MFIs are performing relatively better compared with the African MFIs median and Grameen Bank. This performance may attract more equity investors to the sector and strengthen their financial capacity.

iii. ***Portfolio at Risk>30 days:*** portfolio quality and timely collection of loans is the very important operational performance and efficiency indicator where by the MFIs portfolio portion that have shown a delay in collection for 30 days or more will be presented. In this regard, the Ethiopian MFIs performance is relatively better and well under the threshold stipulated by the regulatory body (below 10%).

4.4 Summary of data collected from Customers

As part of the welferist view of assessing the impact of microfinance institutions on poverty reduction, survey has been conducted on the users of microfinance services. The survey focused on the income, asset creation, quality of life, access to school, and access to health services, access and quality of food consumption and other parameters that may indicate the poverty level of users.Survey questions are designed on the basis of the poverty indicators described in the literature review part and distributed to

respondents on random basis. The selected five big MFIs represent a wide area of the country and serve different types of customers urban and rural poor. In this regard, the questionnaire is given to each MFIs contact person to administer them on random basis for twelve respondentsfrom each sample MFI.A total of 60 respondents are surveyed using a structured questionnaire and summary of the response is presented below.

No.	Description	Respons	Strongly disagr	Disagree	Fair	Agree	Strongly Agre	Total
1	The interest rate charged is fair and affordable	No	7	9	11	26	7	60
		%	11.67	15.00	18.33	43.33	11.67	100
2	Income has increased from what it has been	No	1	3	10	15	31	60
		%	1.67	5.00	16.67	25.00	51.67	100
3	Number and type of assets possessed increased	No	4	5	30	15	6	60
		%	6.67	8.33	50.00	25.00	10.00	100
4	Saving has been increased	No	4	2	13	35	6	60
		%	6.67	3.33	21.67	58.33	10.00	100
5	Access to education improved (all school -age children got access)	No	4	1	16	31	8	60
		%	6.67	1.67	26.67	51.67	13.33	100
6	Access to health services improved	No	5	1	6	16	32	60
		%	8.33	1.67	10.00	26.67	53.33	100
7	Financial position has improved	No	2	2	3	17	36	60
		%	3.33	3.33	5.00	28.33	60.00	100
8	Support received from MFI have been encouraging to run the business	No	11	17	21	10	1	60
		%	18.33	28.33	35.00	16.67	1.67	100
9	Employment opportunity have increased	No	2	2	9	44	3	60
		%	3.33	3.33	15.00	73.33	5.00	100
10	Type of food and number of meals consumed increased	No	1	2	18	29	10	60
		%	1.67	3.33	30.00	48.33	16.67	100
11	Overall progress observed in the general living standards of the family	No	1	2	3	15	39	60
		%	1.67	3.33	5.00	25.00	65.00	100
12	The loan repayment schedules are convenient	No	9	15	23	8	5	60
		%	15.00	25.00	38.33	13.33	8.33	100
13	Appropriate training has been given to start and manage the business	No	8	9	30	9	4	60
		%	13.33	15.00	50.00	15.00	6.67	100
14	The loan amount is sufficient enough to run your business	No	21	16	12	7	4	60
		%	35.00	26.67	20.00	11.67	6.67	100
15	The program helped you to acquire assets like TV, Radio, proper bed etc	No	6	11	36	4	3	60
		%	10.00	18.33	60.00	6.67	5.00	100

Table 15 summary of response from survey questionnaire

1. For the question related with the interest rate being charged by the MFIs, majority of the respondents agreed that the rate is reasonable and affordable with only 26% respondents evaluate the interest rate as very high and unaffordable.
2. More than 75% of the respondents witness that their income increased as the result of participating in the microcredit program. This implies that the Ethiopian microfinance institutions are contributing to the poverty reduction effort.
3. The increase in asset possession is another indicator that the poor borrowers are benefiting from the MF program. In this regard, most respondents reply that their asset possession is fairly increased and increased (50% said fairly increased and 35% said it has increased and highly increased).
4. The other indicator for poverty reduction is the saving pattern of poor borrowers in which the saving pattern can contribute smoothing of the consumption, help to acquire reserves for bad times. In this regard, 58% of the respondents replied that their savings has been increased and 10% said highly increased.
5. With regard to the poverty indicator related with access to education, out of all respondents 65% said that they are able to send their school aged children to school. This is also another indicator whereby microfinance program contributed to help the poor have access to education.

6. Access to health service is also another important indicator of poverty. For the question whether microfinance borrowers are able to improve their access to health services after they are participated in the program, 80% of them said yes it does.
7. Poverty is explained as deprivation of basic needs, the increase in the type of food and number of meals consumed has been considered as one of the indicators for reduction in poverty level. In this regard, 30% of the respondents' replies as fairly increased, 40% respond that it has increased and 17% said it has highly increased. From this, one can understand that the poor people that are participated in the microfinance program are able to secure food self-sufficiency.
8. As a summary, a question presented to respondents on the overall progress of their living standards. For this question, 25% of respondents reply that their overall living standard is improved and 65% said it is highly improved.
9. Respondents were asked to evaluate the support they receive from the MFI institution to run their business and 28% of them it is not sufficient while 18% said it is totally insufficient. In this regard, the Ethiopian MFIs have to design a proper methodology to support their clients rather than just providing loan.
10. The loan repayment schedule is another critical factor that can affect the borrower's productivity. In this regard a question presented to respondents as to how the

repayment schedule is set by the MFIs on the loans provided is convenient. 40% of the respondents said the repayment schedule is not convenient and 38% rated it as fair. Microfinance institutions should consider the harvesting time for agricultural input loans and provide sufficient time for repayment in loans given for small and micro businesses.

11. Microfinance as a development tool should be engaged in the provision of appropriate training to their borrowers on aspects such as entrepreneurship, financial management, and marketing. In this regard, respondents were asked to evaluate MFIs performance in the provision of the required training to their customers. 50% of the respondents said it is fair and 28% said it is below their expectation
12. The other most important factor in supporting the poor through microfinance activity is average loan size per borrower. Respondents were asked if the loan amount given to them is sufficient enough to support their business. 61% of the respondents said the loan amount given to them is not sufficient enough to run and expand their business.

CHAPTER V - Conclusion and Recommendations

From the discussions and data analysis in the previous chapters, the researcher tried to come up with conclusions and recommendations on the basis of the research questions and test the hypothesis.

① In line with the first research question "how do the Ethiopian microfinance institutions perform in the last decade to reach to the poor and support the country's poverty reduction effort?" factors that indicate the outreach of MFIs has been analyzed and the findings are presented. Based on the four criterion used to evaluate the outreach performance and microfinance market development, we can conclude that the Ethiopian MFIs are doing well and the market is showing a progress over time. It is good to note that microfinance activity (in its formal way) started in Ethiopia after 1998 and the overall performance of institutions cannot easily be compared with Grameen Bank its establishment goes 15 years back to 1983. The recommendations in this aspect are that appropriate incentives for encouraging customers to save and non-borrowers also to use the service shall be used. Moreover, in order to further enhance the outreach of microfinance institutions in Ethiopia, the current problem related to loanable funds shall be

addressed through government and/or NGOs. The other most important aspect of outreach is the number of females being served. In this regard, data evidence show that Ethiopian MFIs are focusing less on females unlike the Grameen bank that is fully women focused. similar to any developing country, women in Ethiopia are the most economic disadvantaged segment of the society and shall be supported.

② As to the second research question, "Are the MFIs in Ethiopia sustainable and prudent enough to guarantee a stable credit market and what does their performance look like compared with other countries MFIs?" the study employed two methodological approaches to address the issue of sustainability and profitability.

The financing structure indicators used to evaluate the performance of the Ethiopian MFIs with regard to four indicators (ratio analyses). The result obtained shows that the Ethiopian MFIs are having a better financing structure and more resilient to unforeseen shocks. The deposit to loan ratio indicated that Ethiopian MFIs have to work more on deposit collection as the ratio figure is relatively lower than Grameen Bank. The general conclusion in relation to the sustainability factors indicate that the Ethiopian MFIs are doing well. The research would like to

recommend that the Ethiopian MFIs have to work more to improve their deposit collection or study and revise the compulsory deposit rate taking in to account the borrowers capability to afford. As it is well known, Ethiopia is highly exposed country to periodic climatic change (drought) that may affect agricultural output and hence borrowers may fail to repay their loan in such incidents. For that, MFI's in Ethiopia should maintain adequate cushion to withstand such periodic shocks.

The financial performance indicators, the research used to evaluate the profitability of MFIs include ROA, ROE and PAR. In this regard, in all the three indicators, the performance of the Ethiopian MFIs is better than both the African MFIs median and Grameen Bank. As profitability remains a debatable aspect of microfinance business, it might be a sign that the institutions are charging a higher interest rate. In this regard, the research recommended that the focus should be on poverty reduction and diversifying of the outreach instead of profit maximization. The argument goes that unlike Grameen bank which has diverse means of revenue generating businesses such as short term investment like time deposits, the Ethiopian MFIs are not allowed to engage in such activities and the only source of income remain to be interest income from individual borrowers. In this situation,

the higher profit record of these MFIs means exaggerated interest rates imposed on borrowers which in the end are against the broad poverty reduction objective. The recommendation in this regard should be that the regulatory institution shall see another means to support MFIs profitability such as possibility to engage in additional revenue generating activities rather than being dependent on loan interest which ultimately affects the loan recipients.

The conclusions stated under numbers 1 and 2 above signify that the first hypothesis holds true. MFIs in Ethiopia are sustainable enough to facilitate the financial intermediation and support the poverty alleviation effort in the country

③ The third and the last research question "the reaction of beneficiaries of the MF program on its real impact to reduce household level poverty?" summary of the findings on the survey indicate that in most parameters, customers response evidenced that the microfinance program is contributing a lot on the household level poverty reduction. The survey also indicated areas mainly related with auxiliary services that should be improved such as;

- The loan balance being given per borrowers is too small

- The support MFIs supposed to provide to their clients on their business should be improved
- The loan repayment schedule should not be so tight and should consider harvesting time.
- MFIs have to give appropriate training to their clients instead of giving just the loan.

From this conclusion, we can test our second hypothesis “Participation of clients in microfinance program would bring about significant reduction in the level of poverty” and proved true.

REFERENCES

Bibliography

Aghion and Morduch. (2004). *The Economics of Microfinacne.* MIT Press.

Bank World. (June 2013). *A joint report of Human Development & Poverty Reduction and Economic Development Sectors, South Asia region, World Bank.* Dhaka: World Bank.

grameen.com. (n.d.). *Grameen Bank*. Retrieved 07 10, 2016, from Grameen Bank: http://www.grameen.com/index.php?option=com_content&task=view&id=43

Hailu, L. (2006). Credit and risk management. *AEMFI Conference proceeding on microfinance development in Ethiopia.* Bahir Dar.

Imene, B. (2009). Social performance Vs Financial Performance of Microfinance Institutions. *East Paris University, ERUDITE*.

Khandker, S. (1999). *Fighting Poverty with Micro credit: Experience in Bangladesh.* Dhaka : the University Press Limited, Bangladesh.

Ledgerwood, J. (1998). *Sustainable Banking with the poor: Microfinance Handbook.* Washington D.C: World Bank.

Ledgerwood, J. (2002). Sustainable Banking with the Poor: an Institutional and Financial Perspective. Washington D.C.

MoFED. (2010). *Annual Report on Financial sector development.* Addis Ababa: MoFED.

Montgomery, R. (1996). Disciplining or protecting the poor? Avoiding the social cost of peer pressure in micro-credit schemes. *Journal of international development*.

Morduch, J. (1998). Does Microfinance Really Help the Poor? New evidence from flagship programs in Bangladesh. *Department of Economics and HIID Harvard university and Hoover Institution, Stanford University*.

Mosley, P. a. (1998). Microenterprise Finance: Is there a conflict between growth and poverty alleviation? *World Development*.

Moti, D. (2003). Impact of Microfinance on poverty. *Addis Ababa University*, 1.

Navajas, S. S.-V.-M. (2000). Microcredit and the poorest of the poor: theory and evidence from Bolivia. . *World Development, 28*, pp. 333-346.

NBE, N. B. (2013). *Risk based supervision manual of MFIs and (Birritu quarterly megazin).* Addis Ababa: NBE.

Nitin, B. a.-Y. (2001). Delivering Microfinacne in Developing Countries: Controversies and Policy Perspectives. *Policy Studies Journal, Vol. 29*, 319-333.

Osamani, L. N. (1989). Limits to the alleviation of poverty through non-farm credits. *Journal of Bangladesh institute of development studies*.

Parker, J. (2000). Assessing Poverty of Microfinance clientele: A review of current

practice. *video conference.* Washington D.C, USA.

Rajasekhar, D. (2004). Microfinance and Poverty alleviation:Issues related to NGO Programs in Western India. *Institute for Social and Economic Change*, 146.

Schreiner, M. (2002). Aspects of Outreach: A Framework for Discussin of the Social Benefits of Microfinance. *Journal of International Development, Volume 14.*

SUZUKI et.al. (2013). Islamic Banking and the Grameen mode of microcredit in Bangladesh: An institutional comparison. *Contemporary South Asia.*

SUZUKI, Y. (2011). *Japanese Financial Slump:Collapse of Monitoring System Under Institutional and Transition System.* Palgrave Macmillan.

Tiruneh, A. (2006). *Impact of microfinance on poverty reduction.* Retrieved 05 20, 2016, from Addis Ababa University: http://etd.aau.edu.et/dspace/bitstream/123456789/721/ABEBE%20TIRUNEH.pdf

Wolday. (2007). Microfinance and Poverty reduction in Ethiopia. Addis Ababa: AEMFI.

Wolday, A. (2012). The Role of Finance and Business Development Service (MSE Development in Ethiopia). *AEMFI annual conference.* Addis Ababa: AEMFI.

World Bank Poverty assessment report. (2014). *Poverty Assessment Report.* Addis Ababa: World Bank .

Yaron, J. (1997). What makes Rural Finance Institutions Successful? . *the World Bank Research Observer. Vol. 9 No. 1.*

APPENDICES

Annex – 1Sample questionnaire Amharic version

የዚህመጠይቅዋናአላማየብድርእናቁጠባተቋማትለድህነትንቅነሳ/ማጥፊትያላቸውሚናመመዘን/መገምገምየተዘጋጀጥናትነው::

በመሆኑምየሚሰጡትመረጃበአጠቃላይለትምህርትአላማብቻየሚውልሲሆንከተቋሙጋርምንምአይነትግንኙነትየለውምስለዚህ ትክክለኛመረጃበመስጠትእንዲተባበሩኝበትህትናእጠይቀዎታለሁ::

ለመልካምትብብርዎበቅድሚያአመሰግናሁ፡

1. በብድርተቋሙየሚጠየቀውወለድተመጣጣኝነው

① በጣምአልስማማም
② አልስማማም
③ መካከለኛ
④ እስማማለሁ.
⑤ በጣምእስማማለሁ

2. በብድርተቋሙአገልግሎትማግኘትከጀመሩበኋላገቢዎአድጓል

① በጣምአልስማማም
② አልስማማም
③ መካከለኛ
④ እስማማለሁ.
⑤ በጣምእስማማለሁ

3. በብድርተቋሙአገልግሎትማግኘትከጀመሩበኋላቋሚንብረትማፍራትችለዋል

① በጣምአልስማማም
② አልስማማም
③ መካከለኛ

④ እስማማለሁ.

⑤ በጣምእስማማለሁ

4. በብድርተቋሙአገልግሎትማግኘትከጀመሩበኋላየቁጠባመጠንዎአድጓል

① በጣምአልስማማም
② አልስማማም
③ መካከለኛ
④ እስማማለሁ.
⑤ በጣምእስማማለሁ

5. በብድርተቋሙአገልግሎትማግኘትከጀመሩበኋላእድሜያቸውለትምህርትየደረሰልጆችዎንወደትምህርትቤትመ ላክችለዋል

① በጣምአልስማማም
② አልስማማም
③ መካከለኛ
④ እስማማለሁ.
⑤ በጣምእስማማለሁ

6. በብድርተቋሙአገልግሎትማግኘትከጀመሩበኋላበዘመናዊየህክምናተቋማትመታከምችለዋል

① በጣምአልስማማም
② አልስማማም
③ መካከለኛ
④ እስማማለሁ.
⑤ በጣምእስማማለሁ

7. በብድርተቋሙአገልግሎትማግኘትከጀመሩበኋላበቂየገንዘብአቅምፈጥረዋል

① በጣምአልስማማም

② አልስማማም

③ መካከለኛ

④ እስማማለሁ.

⑤ በጣምእስማማለሁ

8. የንግድስራዎንለማካሄድከብድርተቋሙበቂድጋፍአግኝተዋል

① በጣምአልስማማም

② አልስማማም

③ መካከለኛ

④ እስማማለሁ.

⑤ በጣምእስማማለሁ

9. የስራመልካምኢጋጣሚዎችጨምረዋል (ስራተቀጥረውየሚሰሩከሆነ)

① በጣምአልስማማም

② አልስማማም

③ መካከለኛ

④ እስማማለሁ.

⑤ በጣምእስማማለሁ

10. በብድርተቋሙአገልግሎትማግኘትከጀመሩበኋላእርስዎናቤተሰብዎየሚመገቡትምግብበአይነትበጥራትናበብዛትተሻሽሏል

① በጣምአልስማማም

② አልስማማም

③ መካከለኛ

④ እስማማለሁ.

⑤ በጣምእስማማለሁ

11. በብድርተቋሙአገልግሎትማግኘትከጀመሩበኋላአጠቃላይየቤተሰብየኑሮሁኔታተሻሽሏል

① በጣምአልስማማም
② አልስማማም
③ መካከለኛ
④ እስማማለሁ.
⑤ በጣምእስማማለሁ

12. የብድርተቋሙየብድርአሰባሰብየጊዜአወሳሰንተስማሚነው

① በጣምአልስማማም
② አልስማማም
③ መካከለኛ
④ እስማማለሁ.
⑤ በጣምእስማማለሁ

13. የብድርተቋሙየንግድስራዎትንለመጀመርእንዲሁምለመምራትየሚያስችልስልጠናሰጥቶዎታል

① በጣምአልስማማም
② አልስማማም
③ መካከለኛ
④ እስማማለሁ.
⑤ በጣምእስማማለሁ

14. የብድርተቋሙየንግድስራዎትንለመጀመርእንዲሁምባግባቡለማስኬድየሚያስችልበቂመጠንያለውየብድርመጠ ንሰጥቶዎታል

① በጣምአልስማማም
② አልስማማም

③ መካከለኛ

④ እስማማለሁ.

⑤ በጣምእስማማለሁ

15. በብድርተቋሙአገልግሎትማግኘትከጀመሩበኋላአስፈላጊንብረቶችእንደቴሌቭዥንራዲዮአልጋየመሳሰሉትንመግ ዛትችለዋል

① በጣምአልስማማም
② አልስማማም
③ መካከለኛ
④ እስማማለሁ.
⑤ በጣምእስማማለሁ

Annex -2 Sample questionnaire English version

Ritsumeikan Asia Pacific University (APU)
Graduate School of Management
Japan

Dear respondent,

This is a questionnaire that intended to assess the impact of microcredit institutions in poverty alleviation. The information you provide is used only for academic purposes and shall be kept strictly confidential. Therefore, you are kindly requested to give accurate information.

Thank You for your cooperation

1. The interest rate charged by the microfinance institution is fair and affordable

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

2. Your income is increased as the result of your participation in the program

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

3. The number and type of assets you have possessed increased as the result of your participation in the program

① Strongly disagree

② Disagree
③ Fair
④ Agree
⑤ Strongly agree

4. Your saving has been increased as the result of participating in the microcredit program

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

5. You are able to send all your school age children to school after you have participated in the microfinance program

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

6. After participating in the microfinance program, you are able to get medical and health care services in clinic or hospitals

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

7. Your financial position has been increased as the result of participating in the microcredit program

① Strongly disagree
② Disagree

③ Fair
④ Agree
⑤ Strongly agree

8. The level of support received from the MFI have been encouraging to run the business

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

9. Employment opportunity has been increased as the result of participating in the microcredit program

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

10. The type of food and number of meals consumed has been increased after you have participated in the microcredit program

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

11. Overall progress has been observed in the general living standards of the family since you started participation in the microcredit program

① Strongly disagree
② Disagree
③ Fair

④ Agree
⑤ Strongly agree

12. The loan repayment schedules are convenient for you

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

13. Appropriate training has been given by the microfinance institution to start and manage your business

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

14. The loan amount provided by the microfinance is sufficient enough to run your business

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

15. The program helped you to acquire assets like TV, Radio, proper bed etc

① Strongly disagree
② Disagree
③ Fair
④ Agree
⑤ Strongly agree

Thank you very much!!

Annex – 3 Summarized Quantitative data

Year	ACSI	ADCSI	DECSI	OMO	OCSSCO	Average	Grameen Bank	Africa (Median)
total asset								
2002	25,814,648	1,934,634	30,490,903	4,864,201	9,667,395	14,554,356	315,707,327	
2003	32,933,208	7,082,217	34,019,415	5,503,713	13,252,217	18,558,154	394,039,512	
2004	53,239,412	16,234,384	57,222,627	7,510,289	20,551,685	30,951,679	514,719,581	
2005	67,930,715	20,093,101	103,363,657	13,803,948	29,255,989	46,889,482	633,023,845	
2006	95,830,726	23,547,201	118,249,358	16,222,060	58,834,886	62,536,846	819,799,478	
2007	138,800,965	26,251,942	171,228,825	27,097,646	69,375,128	86,550,901	941,270,138	
2008	197,847,309	34,803,186	185,844,935	33,164,705	85,134,725	107,358,972	1,117,815,461	
2009	185,115,431	31,138,242	164,951,837	41,382,467	102,717,177	105,061,031	1,411,363,085	
2010	210,581,937	37,891,520	173,286,719	50,634,957	118,351,608	118,149,348	1,713,365,603	
2011	246,933,975	42,178,085	184,108,467	58,146,328	141,647,226	134,602,816	1,647,022,564	
2012	292,694,577	49,210,436	195,484,939	64,527,465	159,718,006	152,327,085	1,900,430,694	
2013	372,219,521	64,208,749	207,642,910	71,319,642	177,604,337	178,599,032	2,213,120,838	
2014	474,889,932	76,223,112	223,149,175	82,174,344	201,764,285	211,640,170		
gross loan Portfolio (USD)								
2002	18,394,810	1,047,341	13,317,572	2,013,428	7,147,403	8,384,111	213,440,181	498,125
2003	23,849,812	4,781,057	23,168,976	3,532,467	10,136,107	13,093,684	268,030,809	623,257
2004	36,417,198	13,356,411	46,365,572	4,415,256	15,622,650	23,235,417	337,701,326	875,651
2005	51,258,097	13,899,367	77,918,547	8,769,333	25,004,854	35,370,040	424,472,501	865,039

2006	78,201,270	19,637,825	85,266,397	12,882,030	47,469,352	48,691,375	482,086,331	937,462
2007	110,591,636	24,158,703	118,766,535	20,424,703	52,455,355	65,279,386	532,024,502	1,581,524
2008	155,668,558	28,795,929	145,826,452	27,037,417	62,639,156	83,993,502	642,257,512	1,816,220
2009	131,184,763	25,498,654	107,610,231	36,813,225	76,352,189	75,491,812	817,389,833	1,521,261
2010	108,204,381	31,208,937	116,291,504	43,825,316	84,731,055	76,852,239	939,129,906	1,487,517
2011	169,650,670	32,171,485	120,417,089	46,301,472	95,886,665	92,885,476	920,685,919	1,806,773
2012	194,582,832	36,847,130	127,994,418	48,824,197	107,860,694	103,221,854	1,007,989,551	1,852,455
2013	233,147,825	41,825,133	138,204,336	51,204,728	118,311,461	116,538,697	1,091,739,513	3,188,350
2014	287,254,749	48,353,959	150,623,710	55,139,246	137,516,904	135,777,714	1,122,454,650	3,942,895

Deposits

Year	ACSI	ADCSI	DECSI	OMO	OCSSCO	Average	Grameen Bank	Africa (Median)
2002	10,854,372	291,346	8,201,461			6,449,060		139,774
2003	14,586,071	1,364,725	14,891,898		2,301,461	8,286,039		265,196
2004	20,116,135	3,104,876	17,901,842		8,134,728	12,314,395		341,854
2005	27,455,341	3,864,197	21,782,529	4,003,320	13,046,727	14,030,423	306,212,806	516,731
2006	41,612,987	4,523,974	22,871,741	5,712,251	19,203,435	18,784,878	396,027,410	527,838
2007	61,536,718	5,984,325	32,901,910	8,390,892	25,204,743	26,803,718	433,448,946	872,685
2008	83,368,420	6,980,354	39,975,665	11,251,997	33,677,073	35,050,702	934,103,728	974,584
2009	78,235,014	8,241,496	41,839,493	14,319,520	39,137,996	36,354,704	1,208,567,580	957,177
2010	70,267,621	11,313,475	45,871,637	18,346,710	45,134,557	38,186,800	1,486,525,133	1,076,665
2011	101,336,171	12,968,411	51,205,289	21,628,123	52,571,741	47,941,947	1,436,981,834	1,308,465
2012	123,808,118	19,251,973	67,921,443	28,613,728	68,468,053	61,612,663	1,647,496,423	1,274,859

2013	182,971,825	26,417,909	88,147,926	34,718,346	81,337,649	82,718,731	1,921,929,798	2,379,147
2014	258,675,697	36,676,100	111,274,093	44,131,085	92,428,437	108,637,082	2,178,229,763	3,007,246

capital to asset ratio

2002	38.78%	82.20%	43.09%	21.50%	62.92%	49.70%	10.81%	36.72%
2003	46.75%	88.78%	43.79%	22.70%	53.90%	51.18%	19.76%	36.40%
2004	33.52%	70.14%	33.87%	17.74%	52.74%	41.60%	15.37%	33.25%
2005	32.36%	70.86%	23.25%	10.46%	43.69%	36.12%	11.25%	27.14%
2006	29.98%	77.98%	21.05%	11.72%	29.61%	34.07%	10.81%	26.79%
2007	26.90%	85.86%	20.09%	12.63%	26.73%	34.44%	9.12%	26.66%
2008	23.53%	69.78%	19.22%	21.42%	23.30%	31.45%	12.98%	27.55%
2009	26.26%	69.78%	22.40%	33.73%	24.99%	35.43%	6.93%	27.51%
2010	24.92%	58.21%	22.16%	28.34%	22.91%	31.31%	6.08%	25.18%
2011	27.97%	56.22%	21.67%	25.98%	22.23%	30.81%	5.84%	22.13%
2012	26.44%	45.98%	21.58%	24.91%	21.26%	28.03%	6.04%	26.70%
2013	24.76%	38.21%	21.17%	24.71%	19.85%	25.74%	6.08%	26.82%

Debt to Equity ratio

Year	ACSI	ADCSI	DECSI	OMO	OCSSCO	Average	Grameen Bank	Africa (Median)
2002	1.58	0.22	1.32	3.65	0.59	1.47	8.25	1.38
2003	1.14	0.13	1.28	3.41	0.86	1.36	4.06	1.37
2004	1.98	0.43	1.95	4.64	0.90	1.98	5.51	1.90
2005	2.09	0.41	3.30	8.56	1.29	3.13	7.89	2.39
2006	2.34	0.28	3.75	7.54	2.38	3.26	8.25	2.42

2007	2.72	0.16	3.98	6.91	2.74	3.30	9.96	2.39
2008	3.25	0.43	4.20	3.67	3.29	2.97	6.71	2.20
2009	2.81	0.43	3.46	1.96	3.00	2.33	13.43	2.22
2010	3.01	0.72	3.51	2.53	3.36	2.63	15.44	2.48
2011	2.58	0.78	3.61	2.85	3.50	2.66	16.11	2.58
2012	2.78	1.17	3.63	3.01	3.70	2.86	15.57	2.34
2013	3.04	1.62	3.72	3.05	4.04	3.09	15.46	2.29
2014	3.18	2.01	3.95	3.31	4.26	3.34		2.82
Deposit to loan ratio								
2002	59.01%	27.82%	61.58%	0.00%	0.00%	29.68%		28.06%
2003	61.16%	28.54%	64.28%	0.00%	22.71%	35.34%		42.55%
2004	55.24%	23.25%	38.61%	0.00%	52.07%	33.83%		39.04%
2005	53.56%	27.80%	27.96%	45.65%	52.18%	41.43%	72.14%	59.74%
2006	53.21%	23.04%	26.82%	44.34%	40.45%	37.57%	82.15%	56.31%
2007	55.64%	24.77%	27.70%	41.08%	48.05%	39.45%	81.47%	55.18%
2008	53.56%	24.24%	27.41%	41.62%	53.76%	40.12%	145.44%	53.66%
2009	59.64%	32.32%	38.88%	38.90%	51.26%	44.20%	147.86%	62.92%
2010	64.94%	36.25%	39.45%	41.86%	53.27%	47.15%	158.29%	72.38%
2011	59.73%	40.31%	42.52%	46.71%	54.83%	48.82%	156.08%	72.42%
2012	63.63%	52.25%	53.07%	58.61%	63.48%	58.21%	163.44%	68.82%
2013	78.48%	63.16%	63.78%	67.80%	68.75%	68.39%	176.04%	74.62%
2014	90.05%	75.85%	73.88%	80.04%	67.21%	77.40%	194.06%	76.27%

Deposit to total assets ratio

Year	ACSI	ADCSI	DECSI	OMO	OCSSCO	Average	Grameen Bank	Africa (Median)
2002	42.05%	15.06%	26.90%	0.00%	0.00%	16.80%		18.16%
2003	44.29%	19.27%	43.77%	0.00%	17.37%	24.94%		28.29%
2004	37.78%	19.13%	31.28%	0.00%	39.58%	25.56%		26.74%
2005	40.42%	19.23%	21.07%	29.00%	44.60%	30.86%	48.37%	35.64%
2006	43.42%	19.21%	19.34%	35.21%	32.64%	29.97%	48.31%	39.80%
2007	44.33%	22.80%	19.22%	30.97%	36.33%	30.73%	46.05%	35.20%
2008	42.14%	20.06%	21.51%	33.93%	39.56%	31.44%	83.57%	35.22%
2009	42.26%	26.47%	25.36%	34.60%	38.10%	33.36%	85.63%	39.80%
2010	33.37%	29.86%	26.47%	36.23%	38.14%	32.81%	86.76%	44.88%
2011	41.04%	30.75%	27.81%	37.20%	37.11%	34.78%	87.25%	46.48%
2012	42.30%	39.12%	34.75%	44.34%	42.87%	40.68%	86.69%	45.09%
2013	49.16%	41.14%	42.45%	48.68%	45.80%	45.45%	86.84%	47.09%
2014	54.47%	48.12%	49.87%	53.70%	45.81%	50.39%		48.31%
	Portfolio to Assets ratio							
2002	71.26%	54.14%	43.68%	41.39%	73.93%	56.88%	67.61%	63.61%
2003	72.42%	67.51%	68.11%	64.18%	76.49%	69.74%	68.02%	44.91%
2004	68.40%	82.27%	81.03%	58.79%	76.02%	73.30%	65.61%	46.26%
2005	75.46%	69.17%	75.38%	63.53%	85.47%	73.80%	67.05%	55.26%
2006	81.60%	83.40%	72.11%	79.41%	80.68%	79.44%	58.81%	52.73%
2007	79.68%	92.03%	69.36%	75.37%	75.61%	78.41%	56.52%	50.81%
2008	78.68%	82.74%	78.47%	81.52%	73.58%	79.00%	57.46%	55.57%

2009	70.87%	81.89%	65.24%	88.96%	74.33%	76.26%	57.91%	55.15%
2010	51.38%	82.36%	67.11%	86.55%	71.59%	71.80%	54.81%	60.41%
2011	68.70%	76.28%	65.41%	79.63%	67.69%	71.54%	55.90%	65.54%
2012	66.48%	74.88%	65.48%	75.66%	67.53%	70.01%	53.04%	66.40%
2013	62.64%	65.14%	66.56%	71.80%	66.62%	66.55%	49.33%	59.80%
2014	60.49%	63.44%	67.50%	67.10%	68.16%	65.34%		61.30%
ROA								
2002	1.28%	0.56%	1.02%	0.21%	1.04%	0.82%		−0.64%
2003	1.67%	0.97%	1.56%	0.43%	1.42%	1.21%	0.77%	−0.60%
2004	2.09%	1.23%	3.64%	2.03%	1.60%	2.12%	0.19%	0.57%
2005	3.11%	2.41%	1.85%	1.64%	2.85%	2.37%	2.41%	0.41%
2006	4.15%	2.94%	2.49%	1.53%	2.26%	2.67%	2.46%	0.66%
2007	3.98%	3.02%	3.04%	2.08%	3.85%	3.19%	0.11%	0.84%
2008	3.46%	3.87%	3.54%	2.96%	4.18%	3.60%	1.66%	1.08%
2009	4.23%	3.28%	2.89%	2.37%	4.16%	3.39%	0.43%	0.35%
2010	4.63%	5.61%	3.68%	3.45%	3.81%	4.24%	0.52%	0.68%
2011	3.64%	2.86%	2.12%	1.96%	2.48%	2.61%	0.41%	0.83%
2012	4.98%	4.23%	4.13%	4.13%	3.21%	4.14%	0.86%	1.00%
2013	4.65%	5.62%	4.01%	3.49%	3.12%	4.18%	0.69%	0.77%
2014	4.02%	5.13%	3.64%	4.56%	3.91%	4.25%		1.19%
ROE								
Year	**ACSI**	**ADCSI**	**DECSI**	**OMO**	**OCSSCO**	**Average**	**Grameen Bank**	**Africa (Median)**

2002	3.30%	0.68%	2.37%	0.98%	1.65%	1.80%		-0.49%
2003	3.57%	1.09%	3.56%	1.89%	2.63%	2.55%	4.90%	-0.46%
2004	6.24%	1.75%	10.75%	11.44%	3.03%	6.64%	1.07%	1.65%
2005	9.61%	3.40%	7.96%	15.68%	6.52%	8.64%	18.40%	1.97%
2006	13.84%	3.77%	11.83%	13.06%	7.63%	10.03%	22.37%	4.19%
2007	14.80%	3.52%	15.13%	16.46%	14.41%	12.86%	1.07%	5.58%
2008	14.70%	5.55%	18.41%	13.82%	17.94%	14.08%	14.78%	5.79%
2009	16.11%	4.70%	12.90%	7.03%	16.65%	11.48%	4.45%	3.79%
2010	18.58%	9.64%	16.61%	12.17%	16.63%	14.72%	8.04%	4.31%
2011	13.01%	5.09%	9.78%	7.54%	11.15%	9.32%	6.82%	5.74%
2012	18.84%	9.20%	19.13%	16.58%	15.10%	15.77%	14.51%	5.49%
2013	18.78%	14.71%	18.94%	14.12%	15.72%	16.45%	11.36%	2.36%
2014	16.79%	15.45%	18.02%	19.63%	20.57%	18.09%		6.93%

MFI

Year	ACSI	ADCSI	DECSI	OMO	OCSSCO	Average	Grameen Bank	Africa (Median)
2002	132.27%	84.94%	227.66%	74.00%	94.82%	122.74%	96.43%	106.59%
2003	178.43%	102.97%	180.39%	88.72%	149.31%	139.96%	105.41%	108.76%
2004	231.79%	197.31%	215.53%	106.43%	146.77%	179.57%	101.29%	115.59%
2005	199.95%	135.22%	197.32%	111.57%	181.60%	165.13%	116.09%	114.32%
2006	223.91%	123.00%	193.77%	140.53%	147.00%	165.64%	115.97%	114.10%
2007	226.38%	154.00%	173.37%	122.21%	152.00%	165.59%	100.65%	122.20%
2008	201.40%	186.43%	129.98%	143.00%	151.20%	162.40%	111.47%	123.07%

2009	204.16%	147.00%	193.00%	186.00%	155.40%	177.11%	102.69%	116.99%
2010	214.00%	134.00%	147.00%	154.00%	164.00%	162.60%	103.62%	122.32%
2011	242.65%	97.00%	158.00%	201.00%	141.00%	167.93%	102.64%	124.98%
2012	201.00%	128.00%	204.00%	198.00%	205.00%	187.20%	105.50%	124.01%
2013	216.00%	139.00%	216.00%	213.00%	189.00%	194.60%	104.34%	131.81%
2014	228.28%	174.00%	231.00%	221.00%	214.00%	213.66%		123.70%
	Portfolio at Risk >30							
2002	13.30%	2.09%	8.36%	6.31%	28.46%	11.70%	18.41%	3.21%
2003	21.50%	2.71%	14.62%	4.57%	31.93%	15.07%	6.98%	5.88%
2004	1.93%	1.75%	7.32%	5.33%	23.22%	7.91%	7.98%	5.30%
2005	3.94%	1.90%	3.28%	1.18%	12.25%	4.51%	7.78%	8.45%
2006	2.94%	1.55%	2.93%	1.84%	9.84%	3.82%	7.02%	5.94%
2007	2.88%	1.27%	1.66%	2.49%	6.17%	2.89%	0.00%	5.21%
2008	16.23%	1.35%	1.78%	1.98%	5.99%	5.47%	6.21%	7.54%
2009	8.42%	3.80%	2.11%	2.46%	4.68%	4.29%	6.57%	6.79%
2010	4.36%	1.34%	1.64%	2.71%	3.25%	2.66%	6.95%	5.88%
2011	11.54%	1.75%	2.64%	4.09%	6.39%	5.28%	8.76%	1.98%
2012	2.74%	1.94%	1.41%	2.13%	3.45%	2.33%	10.66%	3.39%
2013	2.08%	1.32%	1.46%	2.46%	3.08%	2.08%	9.94%	3.12%
2014	1.46%	1.40%	1.94%	2.86%	2.64%	2.06%	1.04%	3.37%
	Portfolio at Risk >90							
Year	**ACSI**	**ADCSI**	**DECSI**	**OMO**	**OCSSCO**	**Average**	**Grameen Bank**	
2002	11.26%	1.92%	6.94%	5.98%	28.01%	10.82%		

2003	20.16%	2.60%	13.91%	4.12%	31.48%	14.45%	
2004	1.87%	1.62%	6.78%	5.08%	23.11%	7.69%	
2005	3.21%	1.51%	3.02%	1.06%	11.73%	4.11%	7.78%
2006	2.62%	1.44%	2.79%	1.36%	9.76%	3.59%	7.02%
2007	2.45%	1.13%	1.54%	2.14%	5.69%	2.59%	0.00%
2008	14.06%	1.06%	1.61%	1.67%	5.71%	4.82%	5.72%
2009	7.96%	3.26%	1.96%	2.35%	4.43%	3.99%	5.20%
2010	4.01%	1.27%	1.45%	2.48%	3.21%	2.48%	5.75%
2011	9.65%	1.08%	2.36%	3.85%	6.02%	4.59%	7.76%
2012	2.12%	1.78%	1.23%	2.01%	3.13%	2.05%	9.97%
2013	1.84%	1.14%	1.28%	2.32%	2.89%	1.89%	9.40%
2014	1.29%	1.25%	1.75%	2.67%	2.51%	1.89%	0.66%
	No of active borrowers						
2002	255,000	14,271	215,044	62,318	62,150	608,783	2,080,000
2003	288,681	31,841	225,996	70,590	86,998	704,106	2,870,000
2004	351,163	52,820	234,733	75,439	125,782	839,937	3,700,000
2005	434,814	83,000	251,937	82,400	181,403	1,033,554	5,050,000
2006	536,804	91,214	269,164	115,999	263,971	1,277,152	5,960,000
2007	597,723	99,814	292,417	156,975	341,828	1,488,757	6,160,000
2008	710,576	112,259	330,513	207,641	429,708	1,790,697	6,210,000
2009	679,518	136,846	356,149	280,232	471,623	1,924,368	6,430,000
2010	659,635	158,429	384,286	331,642	521,734	2,055,726	6,610,000
2011	775,399	167,308	391,547	352,421	534,916	2,221,591	6,580,000

2012	766,386	195,316	407,283	426,147	602,413	2,397,545	6,710,000	
2013	829,143	221,094	419,393	512,450	684,179	2,666,259	6,740,000	
2014	975,104	243,719	432,098	564,379	761,274	2,976,574		

Percent of Female borrowers

Year	ACSI	ADCSI	DECSI	OMO	OCSSCO	Average	Grameen Bank	Africa (Median)
2002	38.00%	43.08%	23.96%	31.45%	13.58%	30.01%	95.19%	22.00%
2003	29.38%	46.32%	25.00%	37.52%	19.49%	31.54%	95.47%	28.83%
2004	30.43%	51.25%	19.92%	34.26%	23.38%	31.85%	95.68%	37.50%
2005	38.58%	46.76%	22.83%	30.69%	22.08%	32.19%	96.24%	41.22%
2006	49.98%	49.63%	18.60%	29.01%	21.45%	33.73%	96.69%	46.84%
2007	51.21%	52.04%	38.00%	44.10%	24.70%	42.01%	96.85%	53.92%
2008	59.81%	57.21%	39.12%	45.21%	32.14%	46.70%	96.88%	50.96%
2009	63.52%	54.78%	42.41%	47.28%	33.35%	48.27%	96.79%	31.99%
2010	62.58%	61.74%	39.63%	46.95%	36.41%	49.46%	96.39%	48.36%
2011	63.88%	58.41%	37.20%	52.46%	38.65%	50.12%	96.12%	60.78%
2012	62.54%	51.48%	36.26%	55.63%	41.32%	49.45%	96.23%	50.72%
2013	63.01%	56.48%	38.25%	61.42%	44.11%	52.65%		44.06%
2014	62.74%	55.92%	41.93%	64.12%	44.95%	53.93%		57.83%

Average loan balance per borrower

2002	72	73	62	32	115	71	103	
2003	83	150	103	50	117	100	93	
2004	104	253	198	59	124	147	91	

2005	118	167	309	106	138	168	84
2006	146	215	317	111	180	194	81
2007	185	242	406	130	153	223	86
2008	219	257	441	130	146	239	103
2009	193	186	302	131	162	195	127
2010	164	197	303	132	162	192	142
2011	219	192	308	131	179	206	140
2012	254	189	314	115	179	210	150
2013	281	189	330	100	173	215	162
2014	295	198	349	98	181	224	