The Effect of Financing Structure on Financial Performance of Micro Banks: An Empirical Analysis of Ethiopian MFIs

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Abstract
Financing decisions are one of the most critical areas for finance managers. Studying the influence of capital structure and financial performance of the companies is vital. It has always been an area for interest for researchers to understand the relationship between capital structure and financial performance of the business organization. The capital structure of Microfinance Institutions (MFIs) has significant impact on the performance of this organization. Hence, studying the effect of the financial structure of these organizations is imperative. Although the financial structure of financial firms have been studied by some scholars, such types of studies are rare in the MFI sector. Thus the purpose of this study is to investigate the effect of financial structure in the Performance of Ethiopian MFI industry. To accomplish the objective of the study a quantitative research design is employed. The researcher used data of 16 sample MFIs that fulfill the criteria of data availability from the database covering the period of 2008–2015. This study is a moderate attempt to understand the relationship between capital structure and financial performance of the MFIs industry by taking Ethiopia. For this purpose, the study used definition of capital structure in the debt to equity ratio and uses ROE and ROA proxy for financial performance of MFIs. In this study, the data of 16 MFIs listed on MIXMARKET of Ethiopian in a 7-year time horizon (2008-2015) were used. Results of our study demonstrated that capital structure influences financial performance of Ethiopian Micro Banks Industry. The significance of the influence of capital structure on performance of MFIs is respectively belonged to measures taken by the regulatory organ of NBE & finance managers of the Microfinance Institutions to create conducive environment.

1. Introduction
1.1 Back ground of the study
Microfinance institutions (MFIs) are relatively small financial institutions that have traditionally provided small loans to low income citizens with the objective of helping them to engage in productive activities. In the minds of many, microfinance and micro-credit are synonymous. However, microfinance refers to an array of financial services that include credit, savings, and insurance while micro-credit is the provision of credit which is usually used as capital for small business development. They differ from traditional financial institutions in the sense that they only provide services to low income people and often provide loans without collateral (Ledgerood, J., 1999).

Most importantly, MFIs have a unique objective. While financial institutions seek wealth maximization, MFIs seek social wealth maximization. Brau and Woller (2004) argue that this objective could be classified into two operational objectives that managers of efficient MFIs should promote. First, MFIs should generate enough revenue to cover their operating and financing cost. Second, MFIs should focus on poverty alleviation. Despite the successes of many MFIs, millions of low-income individuals in developing countries still do not have access to financial services.

The formal microfinance industry began in Ethiopia in 1994/1995 with the government, Proclamation No 40/1996 designed to encourage Microfinance Institutions to extend credit to both the rural and urban poor of the country. Ethiopian MFIs has made remarkable progress over the past decade, reaching almost two million clients in a country of 77 million people (Letenah, 2009). It has already made a positive impact on the quality of poor people by providing greater access to credit, savings, insurance, transfer, remittances and other financial services, which would otherwise, are unreachable by other formal institution.

Currently, by shifting from their status as non-profit organizations to commercial enterprises, MFIs are evolving into organizations that acquire complex business structures like those found in any traditional bank. To achieve that the small loan portfolio would be profitable for their shareholders, such banks needed to raise interest rates and engage in aggressive marketing and loan collection. The kind of empathy that had once been shown toward poor borrowers to improve social and economic conditions is fast becoming extinct.

The donor agencies and loan providers want the MFIs to become independent of their help as they mature. So, it is not surprising that finding a new way to access capital by MFIs has become the trend in the industry as the lack of access to capital causes slower than optimal growth and large operational deficits. Different empirical studies indicates that debt financing may be under utilized by MFIs as a new source of funding and some other advocaters of innovation say transformation from non-profit to commercial enterprises is the only way to exit.

Consequently, there appears to be no well-defined theoretical notion of an optimal capital structure for a lending institution. As an added level of complexity, MFI is a unique type of lending institution with risk and

return characteristics different from standard lending operations. Given this, there is a need for undertaking an empirical approach to examining MFI performance with respect to capital structures. Since the effect of capital structure on firm's value are one of the most important debatable issues in the fields of corporate finance. A number of capital structure theories have been developed after the pioneering work of Modigliani and Miller (1958) to explain the relationship between capital structure and firm value.

Besides, the contributions of microfinance in the development process, factors that affect their performance have been overlooked by different empirical studies. Despite the theoretical application of capital structure, a specific methodology has not been realized yet, which managers can use in order to determine an optimal debt level to achieve their goals. This may be due to the fact that theories concerning capital structure differ in their relative emphasis; for instance, the trade-off theory emphasizes taxes, the pecking order theory emphasizes differences in information, and the free cash flow theory emphasizes agency costs.

As stated by Kinsman and Newman (1999) examining the relationship between capital structure and firm's performance is very important for many reasons. Among these reasons: first, firm debt level have risen substantially over the preceding periods, requiring an explanation of the impact of debt level on firm's performance, so that appropriate debt level decisions can be made in a particular firm. Second, since managers and investors may have different emphases, the relative strengths of any specific effects of debt on firm's performance must be known. Finally, the most important, reason for studying debt level and firm's performance is to examine the association between debt level and shareholders wealth, since shareholders wealth maximization is a primary goal of firm's managers.

Many research findings that are conducted on capital structure and performance were in banking and other related industry. Accordingly, the impacts of capital structure on MFIs performance have not been studied in the Ethiopian MFIs sector. Therefore, this study fill the gap by using studies that were conducted on the banking and related industry to identify possible factors that affects the performance of MFIs and it examines to what extent those factors affect the performance of MFIs. Various studies examined factors that affect performance of financial firms in general (Abor 2005, Octavia and Brown 2008, Gropp and Heider 2009, Iwarere and Akinleye 2010, Siddiqui and Shoaib 2011). However, there is very few studies conducted specifically in the capital structure and performance of MFIs. For example, to mention (Kyereboah-Coleman, 2007; Bogan, 2008, Kar, K.A., 2011) addressed capital structure issues in this sector. Kyereboah-Coleman, A. (2007) investigated the impact of capital structure on performance of Ghanian MFIs for the period 1995-2004 for 52 MFIs. Bogan (2008) addressed capital structure issue in the global microfinance industry using a sample of top 300 MFIs for the year 2003. Kar K.Ashim (2011) studied the impact of capital structure on the performance of MFIs from an agency theory point of view using a panel data set of 782 in 92 countries for the period 2000-2007. As per view, there is no clear understanding, on each of finding how MFIs choose their capital structure and what factors affect their performance. Therefore, In order to understand the capital structure and performance of MFIs and their unique characteristics it requires such separate study.

(Kyereboah-Coleman, A. 2007) suggested that studying the effect of capital structure on performance is very important. Because, it have an effect on the sustainability and outreach of the organizations. As per this view, this study seeks to address two-fold problem: the first is to provide an insight into the capital structure of Microfinance Institutions in Ethiopia and secondly to examine how this structure influences financial performance. The study uses common accounting ratios (ROA and ROE) to measure performance using a panel data of 16 Micro finance institutions for the period 2008 to 2015. This study is important for various stakeholders like management of MFIs, practitioners, researchers and policy makers like National Bank of Ethiopia (NBE) in several ways. Management of MFIs can identify factors that hinder their performance for proper utilization of debt financing so that, they can take some corrective actions that help them to achieve their intended objective. And also inform policy makers like National Bank of Ethiopia (NBE) in creating conducive environment for MFIs performance to utilize debt as a viable source of finance in the era of increased commercialization of microfinance and expanded outreach goals. Finally, the finding of the study contributes to the gap in literature by extending the effect of financing structures has on performance of Microfinance Institution.

1.2 Problem statement

Financing decisions are one of the most critical areas for finance managers that have a direct influence on capital structure and financial performance of the firm. Because capital structure is directly related with the financing decision of the organization typically, it comprises the mix of debt and equity used to finance the firm. Thus, the theories of capital structure are among the most interesting in the field of finance. Since they give explanations in questions like how much firms should borrow, what is the linkage between capital structure and firms value, how firms choose their capital structure, and so on.

In general the effect of capital structure on firms' financial performance have been studied by different researchers, (Abor, 2005; Berger,N & Dipatti, 2002; Akintoye I , 2008). Few researchers investigated their study

Research Journal of Finance and Accounting
www.iiste.org
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol.9, No.11, 2018
IISTE

on this area and identified both significant and insignificant relationship between capital structure and firms' performance by taking different variables that affect firm's financial performance in the MFIs industry. However, almost all of these studies conducted on large firms operating within well organized capital in developed economy. From this it is clear to understand that there is a need to study the effect of capital structure on MFI's financial performance in Ethiopia. Since, the MFIs, sector has involved as development tool intended to provide credit and financial services to the productive poor who do not have access to formal financial intermediation and are engaged in small and micro enterprise. As MFIs become regulated, commercial funding sources are far more willing to lend to them. In 2001, most of regulated MFIs among the Micro Rate 29 on average had borrowed 4.5 times their equity compared to 1.3 times for unregulated (Farrington, 2008). The large and midsized MFIs have a lower debt equity ratio than the industry average. The small MFIs debt equity ratio cannot be normal even after Ln transformations (Letenah; 2007). He argued that the large and midsized MFIs are not properly using their debt capacity. This might be due to the fear of commercial sources of capital such as commercial banks in lending to MFIs or due to negligence on the part of MFIs managers. However, the MFIs have the potential to levered its equity up to 11 times, the limited prescribed by the Basle convention the international capital adequacy standard for regulated financial institution. According to Association of Ethiopian Micro finance Institution (2010) performance of the industry analysis report shows debt financing on average at amounts equivalent to 0.95 times of their equity. Moreover, to fill the existing debt financing problem gap and to be more sustainable the institution deposits have boosted the growth and expansion in the industry. Meanwhile, the report indicates adding deposits in to debt ratio the institutions remain underleveraged at two times which indicates debt financing is under utilized in Ethiopian MFI industry (AEMFI, 2010). As a result, this may have several implications for their financial sustainability as (Letenah, 2009) noted. Because the presence of low debt may exerts pressure on management to ensure efficiency and productivity. To the best of the researcher's knowledge research studies undertaken on the effect of capital structure on MFIs financial performance in developing countries using an empirical research; especially in Ethiopia remained an explored area. Thus, with these serious shortcomings of the current literature, this study contributes to the existing literature by studying the issue with MFIs in Ethiopia. The researcher interested to analyze the effect of capital structures and to determine whether it have significant relation with performance or not.

The objective of this study is to examine the effect of capital structure on MFIs performance in developing countries; especially in Ethiopia using an econometric model.

Finally, the findings of this empirical study expected to fill this gap and also provide some groundwork upon which a more detailed evaluation could be based to support on this important sector.

1.3.1 General Objective
The general objective of the study is to examine the effect of finance structure on financial performance of Micro Finance Institutions in Ethiopia.

1.3.2 Specific Objectives
❖ To assess the interrelationship between financing structure and performance
❖ To evaluate the effect of MFIs Financing Structure on performance.
❖ To assess the dynamics to which financing structure has on performance of MFIs

1.4 Research Hypothesis
The study examines the determinants of capital structure in MFIs that are considered as standard variables from various empirical results of studies that are related to financial institutions. The researcher tests the hypothesis on the relation between the leverage and the independent variables. The study examines the influence of capital structure on MFIs performance that are considered as standard variables from various empirical results of studies that are related to financial institutions. The researcher tests the following alternative hypothesis on the relation between the performance and the independent variables.

The following hypothesis are formulated for the study

$H_{0:}$ There is a significant relationship between financing structure and financial performance of Micro Banks.
H_1: There is no relationship between financing structure and financial performance of Micro Banks.

2. REVIEW OF RELATED LITERATURE
This section deals with the related literature review presented in to four major sub sections.

The first section deals with the nature and benefits of capital structure in MFI. The second sections of this chapter deals with theories of capital structure developed in the area of corporate finance after Modigliani and Miller Theorem (MMT), who have been awarded a noble prize for their work in 1958. The third section deals with the empirical findings related to the determinants of capital structure of firms. This includes the definitions and relationship between the dependent variable and the independent variables. The fourth section to address the overview of MFI industry in Ethiopia specifically the regulatory framework, sources of finances, saving trend, debt-equity trend, and asset and capital trend. Finally, the summary and conclusions of the review are made

using conceptual frame work.

2. Theoretical and Empirical Literature Review
2.1.1 Capital Structure Theories
Theoretical Perspective

One of corporate finance areas highly debated is the capital structure theory arguments that describe the relevance of capital structure for value creation and identification of determinants of capital structure of firms.

In the capital structure theory the optimal debt-equity ratio that a firm should maintain have been debated by a number of scholars after the work of MM in 1958 where they won a noble prize award for their proposition that the capital structure of a firm is irrelevant or financing decision doesn't matter for the creation of value of the firm. Rather they argued that the investment decisions of firms matters most with the assumption they have provided to prove this theory that is there is a perfect and capital market assumptions (no taxes, no bankruptcy costs, no transaction costs, etc).

However, in the real world the theory does not work, considering this MM revised one of their assumptions and proposed another theory which invalidates the first theory. With the presence of tax the theory states that a firm can benefit from the higher financing of debt because of tax shields. Hence this theory concludes optimal capital structure is 100% debt financing which is a not logical conclusion.

Another is the traditional theory that describes the optimality of debt-equity is obtained at the trade-off balance between the benefits from debt (tax shield) and the cost of debt which leads to bankruptcy (financial distress costs) as a result of higher debt financing and the risk of defaulting the interest and principal.

Finally as they are briefly reported in the theoretical sections of related literature sections the pecking order and agency theories have contributed on the debate of optimality of capital structure. However, all these theories focus on non financial firms who are corporate organizations and the empirical finding of these studies indicated are also tested though there is no consensus on the optimality of debt-equity ratio that a firm should maintain. From these empirical studies it was recognized that the determinants of the capital structure varies from industry to industry.

Therefore, an industry classification is important in studying and understanding the unique firm level characteristics that affect leverage of a given industry.

Unlike the non financial firms that prefer debt for the tax advantage to create the value of firm the benefits commercial debt , MFI prefer debt not for tax advantage rather debt is less expensive than equity because of unattractive investment opportunity the investors require to be compensated . The other benefits of debt financing are deposits cannot be collected in volumes sufficient to cover loan demand. The debt financing need of these institutions is to achieve the large scale outreach and increasing demand of loan able funds requirement. Therefore, this study tries to link the optimal capital structure that the industry analysts in the sectors recommended as target. In order to understand these determinants of capital structure need to be identified and hypothesize it existing theories to empirically test and to understand how MFI in Ethiopia leverage is affected.

The determinants of capital structure are one of the most debated issues in the area of corporate finance literature. Since the 1958 MM theorem that explains on the relationship between capital structure and firm value, how firms choose their capital structure and how much they should borrow based on the trade-off between the cost and benefit of debt and equity, there are two capital structure theories that have been developed:

    1. The Trade-off theory
    2. The Pecking order theory

2.1.2 The Trade-off Theory

According to this theory the optimal debt ratio is set by balancing the trade-off between the benefits and cost of debt, through this theory we can achieve the optimal capital structure when the marginal value of the benefits associated with the debt issue exactly offset, the increase in the present value of the costs associated with issuing more debt (Ross et, al, 2008).

Ross and his colleagues argue that the trade-off theory of the capital structure suggests that a firm's target leverage is driven by three competing forces:

    i)   Taxes (Benefits)
    ii)   Costs of financial distress(Bankruptcy)
    iii)   Agency cost

Taxes Adding debt to a firm's capital structure lowers its (corporate) tax liability and increases the after-tax cash flow available to the providers of capital. Thus, there is a positive relationship between the (corporate) tax shield and the value of the firm.

Bankruptcy costs When a firm raises excessive debt to finance its operations, it may default on this debt. However, it is not bankruptcy *per se* that is the problem. If the bond payments are not met when they become due and the bond defaults, the firm is simply transferred to the bondholders. However, there are deadweight (opportunity) costs that arise in the case of corporate bankruptcy. They come in two forms, direct and indirect

deadweight costs (Ross et, al, 2008).

Direct out-of-pocket expenses for the administration of the bankruptcy process (legal fees and management time) are relatively small compared to the market values of the firms. However, there are economies of scale with respect to direct bankruptcy costs. While they seem of less important for large firms, they can be substantial for small firms.

Indirect bankruptcy costs can be significant for both large and small firms.

Once the firm runs into financial distress, it is obvious that the firm's investment policy changes, which results in a reduction of firm value. Most obvious, the firm may decide on shortsighted cutbacks in research and development, maintenance, advertising, and educational expenditures that ultimately result in lower firm values. Besides, bankruptcy hampers conduct with customers. They are usually lost because of both fear of impaired service and loss of trust (Ross et, al, 2008).

To sum up, the trade-o theory of the capital structure posits that there is an optimal debt-equity ratio. Firms attempt to balance the tax benefits of higher leverage and the greater probability (and the possibly higher associated costs) of financial distress.

Agency costs arise as a result of the relationships between debt-holders and shareholders and those between shareholders and managers (Jensen and Meckling, 1976). The conflict between debt-holders and shareholders is due to moral hazard. The conflict between shareholders and managers arises because shareholders are the residual claimants and thus managers do not capture the entire gain from their profit-enhancing activities but they do bear the entire cost of these activities (Harris and Raviv, 1991). The agency conflict between shareholders/owners and debt providers may be particularly severe for firms, increasing moral hazard and adverse selection problems.

2.1.3 Pecking Order Theory

The second theory suggested by Myers and Majluf (1984) is, firms have a pecking order in the choice of financing their activities. The pecking order theory suggests that firms have a particular preference order for capital used to finance their businesses (Myers, 1984). Owing to the presence of information asymmetries between the firm and potential financiers, the relative costs of finance vary between the financing choices. Where the funds provider is the firm's retained earnings, meaning more information than new equity holders, the new equity holders will expect a higher rate of return on capital invested resulting in the new equity finance being more costly to the firm than using existing internal funds.

A similar argument can be provided between the retained earning and new debt-holders. In addition, the greater the exposure to the risk associated with the information asymmetries for the various financing choices besides retained earnings, the higher the return of capital demanded by each source. Thus, the firm will prefer retained earnings financing to debt, short-term debt over long-term debt and debt over equity.

The information costs associated with debt and equity issues has led Myers (1984) to argue that a firm's capital structure reflects the accumulation of past financial requirements. There is a pecking order of corporate financing: (i) firms prefer internal finance; (ii) if internal finance is not su cient and firms require external finance, they issue the cheapest security first. In this case, they start with debt, then possibly hybrid securities such as convertible bonds, and issue equity only as a last resort. In contrast to the trade-o theory, there is no well-defined target leverage ratio in the pecking order theory. There are two kinds of equity, internal and external; one is at the top of the pecking order and one at the bottom. A firm's leverage ratio thus reflects its past cumulative requirement for external finance.

The pecking order theory can explain why the most profitable firms tend to borrow less; they simply do not need external funds. Less profitable firms issue debt because they do not have su cient internal funds and because debt has lower flotation and information cost compared to equity. Debt is the first source of external finance on the pecking order. Equity is issued only as a last resort, when the debt capacity is fully exhausted. Tax benefits of debt are a second-order e ect. The debt ratio changes when there is an imbalance between internal funds and real investment opportunities.

2.2 Empirical Literature Review

Bogan (2009) stated that the capital structure of lending institutions has become an increasingly prominent issue in the world of finance. According to her since capital constraints have hindered the expansion of microfinance especially the question of how best to finance these organizations is a key issue. As the paper examined the source of funding for MFIs globally using a panel data to link between the capital structure and MFI success, the study found that leverage have significant effect on the sustainability of MFIs and the increased use of grants by large MFIs decreased operational self-sufficiency.

Today MFIs have an increasingly broad range of financing sources at their disposal. This allows for greater funding diversification, but it also makes decisions about capital structure more complex (CGPA, 2007). Similarly with other firms the capital structure of MFIs, the mix between debt and equity financing, are the two components. In this era of commercialization many MFIs are launching large scale deposit mobilization and long

term debt campaign as a core funding strategy (CGPA, 2007). Determining optimal capital structure of MFIs has been overlooked by empirical studies, which requires analysis of a number of factors. In general this study tries to address the firm level determinants of capital structure using a panel data.

One of the major studies that were conducted by Kyereboah-Coleman (2007) looks at microfinance institutions in Ghana. The results imply a positive effect of debt on MFI outreach and thus its capacity to exploit economies of scale, which leads to higher income margins. In addition, highly-leveraged MFIs were found to experience less defaults by microcredit customers. Further-more, the age of an MFI is positively correlated with defaults. Kyereboah-Coleman interprets this result with the tendency of a micro-bank to grow (following the market penetration strategy) by granting credit to new customers, who may not be as creditworthy as its present customer-base. The capital structure of a microfinance institution, hence, both directly and indirectly determines its financial sustainability. Long-term debt is observed to be the most beneficial type of capital to MFIs as Kyereboah-Coleman indicated.

Most MFIs employ high leverage, and finance their operations with long-term (as opposed to short-term) debt. Highly leveraged microfinance institutions perform better by reaching out to a wider clientele, enjoying economies of scale, and thus being better able to deal with moral hazard and adverse selection, enhancing their ability to deal with risk (Kyereboah-Coleman, 2007). Various factors, other than stage in the life cycle, seem to be associated with the performance of MFIs. Bogan (2008) for example indicates that the size of assets and capital structure of MFIs are associated with performance. In terms of sustainability and outreach, asset size is important: a measure of grants received by MFIs (from donors such as charities, governments and international organizations) as a percentage of assets is significantly and negatively related to sustainability and is positively related to MFI cost per borrower. Bogan (2008) also finds evidence to support the assertion that the use of grants drives down MFI's operational self-sufficiency. She suggests that long term use of grants may be related to inefficient operations due to lack of the competitive pressures that would be associated with attracting market funding. Notably, the results do not indicate that grants are related to greater or more costly outreach. Thus, grants could hinder the development of MFIs into competitive, efficient, sustainable operations (Bogan, 2008).

Many studies have been conducted by using different methods and data from developed and developing countries to define the effects of financial structure on the performance of firms. They investigate the link between the choice of leverage ratios, profitability, firm size, and other factors (such as non-debt tax shields, firm growth and collateral values of assets). The results of most studies provide useful evidence supporting the consistent negative correlation between profitability and the leverage ratio of firms in developed and developing countries.121 They suggest that firms tend to hold fewer debts, especially fewer short-term debts, but they tend to use more long-term debts and equity in countries with better legal protection for shareholders and investors (Fan et al., 2008). In general, these empirical studies do not shed any light on the adjustment process in which firms must trade- off between benefits and costs to achieve an optimal ratio (i.e. the dynamic nature of the financial structure of firms).

On the other hand, several studies have addressed the adjustment process in the leverage ratio or the dynamic nature of the financial structure of firms based on the benefits from the advances in econometrics.122 They discover that firms in developed and developing countries have a target leverage ratio, adjust very fast to their optimal ratio, and rely heavily on external funds and new share issues to finance their growth.123

The main reason is that the relative costs of equity fell significantly during the 1980s due to the large increase in stock prices. Therefore, equity issues became more attractive than debt issues during this decade (Singh, 1995). Some findings refer to large firms and are unlikely to be valid for smaller ones. However, Hovakiman et al. (2001) and Leary and Roberts (2005) conclude that highly profitable firms will be more likely to issue debt rather than equity because they are less subject to high bankruptcy risk and consequently they can borrow at more attractive interest rates. Clearly, these findings are consistent with the suggestion of the trade-off theory. Leverage is found to be negatively related to profitability due to the presence of transaction costs, which prevent firms from adjusting their ratios towards to the optimal ones. The adjustment process depends on whether the firm is below or above its optimal ratio and other factors, such as firm size (scale of operation) and interest rates.

Based on the suggestion of the pecking order theory, Taggart (1985) examines how US firms build their financial structures and concludes that leverage is negatively related to profitability.124 The comparative costs of available financing sources tend to make firms use internally generated funds as a first choice before raising funds. The amount of debt needed will be determined as the residual between the desired 123investment and the supply of retained earnings (Baskin, 1989; Allen, 1993). The main reason is the presence of asymmetric information (Adedji, 1998)

According to the view of Myers and Majluf (1984), firms tend to issue equity when its cost is relatively low.125 The results show that higher cash flow firms tend to use low levels of debt, while a higher investment level will increase the need for debt (Benito, 2003). On the other hand, profitable large firms prefer debt to equity and increase debt according to their financing requirements (Mayer and Sussman, 2003).

However, when both small and large firms suffer losses and if debt would take them to dangerous levels of leverage, issuing equity would be their financing choice. Therefore, new equity issues are generally associated with loss-making small firms. This also suggests that the pecking order theory is more applicable to large firms than small ones, since their sample of firms provides more support for pecking order than that of small firms. There have been numerous studies focusing on testing the suggestions of pecking order theory by using different models for different countries. The results are consistent and follow pecking order theory.

Concerning the effects of financial structure on performance in the financial sector, King and Levine (1993) and Levine and Zervos (1998) provide empirical evidence regarding the strong positive relationship between the financial system and economic growth. It is also suggested that firms tend to rely on external funds for their expansion, and that they grow faster in countries with good financial systems. This finding is consistent with the findings of Rajan and Zingales (1998a), Demirguc-Kunt and Maksimovic (1998) and Demirguc-Kunt and Levine (1999). Demirguc-Kunt and Huizinga (2000) were the first to consider the impact of financial structure on bank performance for a large number of developed and developing countries in the period from 1990 to 1997. They investigate the effects of financial structure on profitability and bank interest margins. The empirical results show that greater bank development is related to lower profitability and interest margins. This means that lower profitability and lower interest margins should be reflections of increased efficiency due to a high level of competition between banks. The study concludes that financial development has an important impact on bank performance.

Following the work of Demirguc-Kunt and Huizinga, some research has been conducted on the determinants of financial structure or profitability in different countries.126 These findings are consistent with pecking order theory.

Hutchison and Cox (2006) test the causal relationship between bank capital and profitability by using bank data from the US in two different time periods: the less regulated period from 1983 to 1989 and the more highly regulated period from 1996 to 2002. Financial leverage is found to be positively related to the return on equity (ROE) or the return on assets (ROA). The findings of this study tend to support the suggestion of trade-off theory.

Girardone et al. (2006) investigate the cost X-efficiency levels in European banks deriving from differences in ownership, bank type and financial structure for the period 1998 to 2003. The results of this study are mixed with regard to the financial structure hypothesis. This seems to suggest that bank efficiency should not be statistically different in bank-based economies versus market-based economies. The hypothesis seems to hold for the sub-sample. The study concludes that bank type characteristics have an important role in explaining the differences in cost efficiency across financial systems, an issue that should be of fundamental importance to policy-makers who are interested in corporate governance principles at the international level.

Aburime (2008) examines the impact of ownership structure on bank profitability in Nigeria in the period 1989 to 2004 and finds that ownership structure had no significant impact on bank profitability. This finding is not consistent with other comparative studies.127 The findings of La Porta et al. (2002) and Micco et al. (2004) suggest that state-owned banks operating in developing countries tend to have lower profitability than privately owned ones due to a lower net interest margin, higher overhead costs, and higher non-performing loans. This seems to suggest that ownership concentration may improve performance by decreasing monitoring costs. However, it may work in the opposite direction (Leech and Leahy, 1991) since there is a possibility that large shareholders may use their control rights to achieve private benefits (Zeitun and Tian, 2007).

In microfinance, Germaine and Natividad (2010) test the effects of asymmetric information on lending and the reductions in information asymmetries based on the assumption of Myers and Majluf (1984).128 They found that MFIs with highly efficient performance can easily access investment funds, and the increase in the number of MFIs made them provide better quality loans to the poor. A positive relationship between evaluations and financing suggests that evaluations lead MFIs to provide more loans to the poor. Their empirical results provide clear evidence of the impact of financing and9 investment on lending. The nature of MFIs varies greatly, as many of them maintain a non-profit status and rely on donations and subsidies. Lafourcade et al. (2005) attempt to extend microfinance services to the poor, who are underserved by MFIs and classified as outreach. The findings also show that African MFIs fund only 25% of the total assets with equity. MFIs finance their activities with funds from various sources, both debts and equity.

Bogan (2009) examines the link between the financial structure and sustainability of MFIs by testing the life cycle theory of financing on the larger MFIs with total assets above US$1 million. The results show that the life cycle stage variables are significantly related to both operational self-sufficiency and financial sustainability. The age of the MFI is found to be related to operational self-sufficiency. Grants are found to be negatively related to sustainability but positively related to costing per borrower. This result is also consistent with the findings of Matu (2008). The feasibility of investment funds is considered to be a key driver for channelling alternative sources of funding to MFIs. The growing competition to access funding sources leads to a financial gap in the supply of microfinance service. Therefore, increasing funds for MFIs during the financial crisis should

be on a short term basis (Littlefield and Kneiding, 2009).

Kyereboah-Coleman (2007) examines the impact of financial structure on the performance of MFIs. This study shows that most MFIs employ high leverage and finance their operations with long-term rather than short-term debt. Highly leveraged MFIs also perform better by reaching out to more clients, and enjoy scale economies; therefore, they are better able to deal with moral hazard and adverse selection, enhancing their ability to deal with risk.

RESEARCH QUESTION
3.1. Research Design and Methodology
This section provides about the methodology adopted to assist in achieving research objectives. It includes the research approach adopted to examine the effect of capital structure on MFIs profitability, the type of data and the techniques to collect data, the sampling mechanism including sample size, methods of data analysis, model specification and measuring variables.

3.1.2. Strategy of Inquiry
This research is designed to examine the effect of capital structure on Microfinance Institutions financial performance. The nature of the study is quantitative and it employs a panel data that is pooling of time series and cross sectional observations. This approach is selected based on the pooling of observation on the cross sectional unit over several time periods and provide result that are simply not detectable in pure cross-section or pure time serious studies. Since this approach endowed with certain special properties such as Micro Finance institutions are heterogonous in their internal determinant and factors. Therefore, it is better than time serious and cross sectional data that run the risk of biasness due to heterogeneity .This approach has several advantages: it considers heterogeneity across firms by including individual- specific effect intercept in a model, gives more informative data, more variability, less collinerity among variables and more degree of freedom. Therefore, the effect of capital structure study is more reliable using panel data than pure cross sectional or time series. Therefore, to get efficient estimates, panel data is appropriate.

3.1.3. Sample and Sampling Techniques
The populations from which the sample sizes are drawn for this study includes all MFIs (31) operate in the country with seven years data starting from 2008 to 2015. The reason, since the MFIs with the required data are limited in number, the researcher selected MFIs that have seven years financial data and excludes MFIs with less than seven years operating life. Specifically, 16 MFIs shall be selected based on purposive sampling. Purposive sampling reasonably taken because the MFIs were identified and selected in terms of financial data for seven years. As a result, the study has 112 observations.

3.1.4. Method of data collection
To comply with the objective of this research, the study is primarily a quantitative research, which constructs an econometric model to identify and measure the effect of capital structure on MFIs financial performance. Specifically, the study is based on secondary data, which obtained from the annual financial reports of the institutions such as (Income Statement, and the Balance sheet of Selected MFIs). additional data form published bulletin, and reports of various governmental and nongovernmental organizations such as AEMFI (Association of Ethiopian Micro Finance Institutions), national bank of Ethiopia and the mix market web sites www.commixmarket have been used. The researcher believes that, the advantage of using secondary data is higher quality as compared with primary data that are collected by researchers themselves (Stewart and Kamins, 1993) with this study deemed appropriate. Secondary data generally provide a source of data that are both permanent and available in the form that can be relatively checked easily by others, that is. more open to public inspection. Therefore, enhance the reliability of the data (Denscombe, 1998)

3.1.5. Methods of Data Analysis
Normally after necessary data collected the researcher clear about the type of data he /she going to analyze. So, following the data collection, the next steps is performed as follow: First, the data had been edited and transferred to a STATA software version 11.Since data are subject to several concerns that may bias the results. Second, various graphic tests were done to decide whether the relation between dependent variable and independent variables has linear patter. Each independent variable relation is tested alone with dependent variable. Finally, the outputs for all independent variables relation with dependent variable have linear patter and independent variables have linear relationship with dependent variable. This test is a precondition to check linearity. Nevertheless, the result is not presented. Descriptive statistics for dependent variable and all independent variables are used to check whether there is a substantial variation in the data. This method gives guarantee for variation of data. A correlation statistics also used merely to observe the direction and magnitude of relations among variables. However, this method does not give assurance for casual relation between the dependent variable and independent variables. Inferential statistics are made to test & infer the hypothesis.

3.1.6. Model Specification and Measuring Variables
Under this subsection, the researcher attempt to clearly select multiple regression models and reasonably discuss

measures of variables. The model is identified based on its potential measurement of MFIs Financial performance as suggested in literature.

Multiple regression analysis is adopted to measure the effect of capital structure on MFIs financial performance since the use of multiple regressions considers the simultaneous relationships (Cooper, 2005) amongst the multiple numbers of independent and dependant variables found across the regression model, therefore suited to the nature of the study.

3.1.6. Measuring Financial Performance (Dependent Variable)

In this study two dependent variables are used to measure the financial performance of MFIs. Due to the absence of secondary market in Ethiopia it is impossible to use market indicators such as market value added and Tobin Q. however, accounting based measure such ROA, and ROE were chosen since they are important and widely accepted measures of financial performance.

1. Return on Asset (ROA): It measures the overall efficiency of management and reflects whether the firm uses assets effectively in order to produce its income and efficient in its operation. So it is an important MFI performance indicator. The return on asset of MFI can be measured as the ratio of earning after interest and tax by total asset of each firm over their respective years. The Earning after interest and tax is also known as net operating income. This ratio tells us how well MFIs uses all its assets profitably. It indicates an overall measure of profitability that reflect both the profit margin and the efficiency of MFI.

$$ROA = \frac{\text{Earnings after Interest and Tax}}{\text{Total Assets}}$$

2. Return on Equity (ROE): It is a comprehensive indicator of a MFI's financial performance. Because it provides information as to how well managers are using the funds invested by the firms' shareholders to generate returns.

$$ROE = \frac{\text{Earnings after Tax}}{\text{Total Equity}}$$

Analytical Framework

$$Y_{it} = \alpha + \beta x + \mu_{it} \text{--1}$$

Where i denoted the individual micro finance institution and t denoting time.

In this case i representing the cross section and t represents the time serious component α constant term, β is coefficient of variables and Xit is the $_{it}$th observation on X explanatory variable. In estimating panel data model the most application make use of a one way error component for disturbance term with

$$\mu it = \mu_i + v_{it} \text{--2}$$

Where , μi represents the unobservable individual specific effecte and vit denotes the reminders of disturbance

3.1.7. Model specification

Following the econometric model by Miyajima et al. (2003) because the model presents itself as the most appropriate, to estimate the following specific multiple regression model:

$$\text{Performance }_{I,t} = a_i + \beta \text{ DebtR}_{it} + \text{Control}_{it} + u_{it} \text{ --------------------------3}$$

Where Debt Rit represents the debt ratio of firm i in time t, and
Control it represents the control variables of firm i in time t.

Following from equation 3, the following equations model for the empirical investigation are listed as follows:

$$\text{Perf} = B_0 + \beta_1 DE_{it}, + \beta_2 Size_{it} + \beta_3 Age_{it} + \beta_4 Atg_{it} + \beta_5 Cdq_{it} + \beta_6 PQ_{it} + \beta_7 Liq_{it} + \beta_8 OwnS + \mu_{it} \text{----4}$$

$$\text{Perf} = B_0 + \beta_1 DE_{it}, + \beta_2 Size_{it} + \beta_3 Age_{it} + \beta_4 Atg_{it} + \beta_5 Cdq_{it} + \beta_6 PQ_{it} + \beta_7 Liq_{it} + \beta_8 OwnS + \mu_{it} \text{----5}$$

Where

Perf = performance measured by ROA and ROE

DE $_{it}$ total debt/total capital for firm i in time t;

Size $_{it}$ = firm size (log of total assets) for firm i in time t;

Age $_{it}$ = measured as the number of years since inception to the date of observation,

Atg$_{it}$ = asset tangibility measured by net fixed asset divided by total asset

PQ$_{it}$ = *portfolio quality* is measured as portfolio at risk over 30 days (PAR >30 days).

Liq$_{it}$ = liquidity measured by ratio of liquid asset to total asset.

Cdqt$_{it}$ = capital adequacy is measured by equity to total assets

Owns= ownership as a measure of dummy variable for gov't block and 0 for NGO 1

3.1.8. Measuring Debt Ratio (Independent Variable)

Leverage refers to the extent to which a firm borrows money relative to its amount of equity. In other words, it answers the question of how many additional dollars can be mobilized from commercial sources for every dollar worth of funds owned by the firms (Letenah, 2009). There are various measures of leverage, which can be classified as accounting based measures, market-value measures and quasi-market value measures. When choosing a measure of leverage, it is useful to keep in mind that the theoretical framework for the relationship between leverage and performance is based on market values of leverage. Since market values of leverage may be difficult to obtain, accounting based measures are often applied as proxies. Rajan & Zingales (1995) discuss

various accounting based measures of leverage and their informational content Similar to previous literature (Abor, 2005; Abor, 2007). The independent (explanatory) variable in this study is the Debt Ratio (DR). Leverage is the ratio of total debt to capital which is defined as total debt plus equity. This measure of leverage looks at the capital employed and the best stand for the effect of past financing decision. Therefore, it is used as the proxy for measure of capital structure in MFIs.

3.1.9. Control variable.

There are a number of factors that may affect firms financial performance, hence, the need for control variables to be included in the model is that these controlled variables are treated in the same way as explanatory variables because they affect a firm profitability in different dimension. The following controlled variables are used: MFI's Size, MFI's Age, Asset Tangibility and Growth, Credit Risk, Liquidity and Capital Strength.

MFIs SIZE

Prior research suggest that firm's size may influence its Financial Performance, larger firms have a greater variety of capabilities and can enjoy economies of scale, however, there are many control variables that the prior researcher did not incorporate in the model (Ramaswamy, 2001; Frank and Goyal, 2003; Jermias, 2008). Therefore, this study utilize additional control variables that influence firm's operating performance in Ethiopian environment by including the size, age, sale growth, credit risk, liquidity ,capital strength and asset tangibility variable in the model.

Size is measured as the log of total asset. Larger firms have a greater variety of capabilities and can enjoy economies of scale; these can impact positively on performance (Penrose, 1959). Additionally, larger firms can exploit market power (Shepherd, 1986), both in product markets as well as in factor-markets, an issue which is particularly relevant in the Ethiopian context where institutional factors have fostered rent-seeking (Bardhan, 1984) and firms are able to earn greater profits. Conversely, larger firms have problems of coordination which can negatively influence performance (Williamson, 1967). Nevertheless, given the Ethiopian institutional prospect, it is likely that market power arguments with respect to size are likely to dominate over coordination failure issues and size and profitability is expected to display a positive relationship.

MFIs AGE

The age of firms is also an important determinant of performance, where measured by the number of years since inception to the date of observation, introduced as a control variable. Older firms can gain experience-based on economy of learning and can avoid the liabilities of newness (Stinchcombe, 1965); however, with age inertia and rigidities in adaptability leading to lower performance (Marshall, 1920). A-priori, no relationship is posited and is left to be empirically determined from the data. Diversification by firms is one way for excess resources to be exploited (Penrose, 1959), and the subsequent foray into new lines of business increases the repertoire of total skills and capabilities within firms which impacts upon the total performance of the organization.

Asset Tangibility:

This is considered to be one of the major determinants of firm's performance. The most common argument in the literature favours a positive relationship between asset tangibility and performance. Mackie- Mason (1990) concludes that a firm with high fraction of plant and equipment (tangible assets) in the asset base made the debt choice more likely and influences the firm performance. Akintoye (2008) argues that a firm which retains large investments in tangible assets will have smaller costs of financial distress than a firm that relies on intangible assets. The relationship between asset tangibility and firm performance is expected to be positive, which is measured by net fixed asset divided by total asset.

Capital Adequacy:

The ratio of equity to total assets (EQAS), which is considered as one of the basic ratios for capital strength (Golin, 2001), is used in this study as a measure of capital strength. He argued that capital strength is linked to bank soundness and safety. This becomes obvious considering that if the MFIs will face a serious asset quality problem and loan loss reserves will be insufficient to allow all bad loans to be written off against them. The excess will have to be written off against shareholder's equity. It is expected that the higher the equity to assets ratio, the lower the need to external funding and therefore the higher the profitability of the bank. In addition, well capitalized banks face lower costs of going bankrupt which reduces their costs of funding.

Portfolio Quality

Portfolio quality is measured as portfolio at risk over 30 days (PAR >30 days). asset quality that indicates how much of the total portfolio has been provided for but not charged off. The higher the ratio the poorer the quality and therefore the higher the risk of the loan portfolio will be.

Liquidity:

As many study mentions it is critical that a financial institution guard carefully against liquidity risk-the risk that it will not have sufficient current assets such as cash and quickly saleable securities to satisfy current obligations e.g those of depositors Especially during the time of economic stress. Without the required liquidity and funding to meet obligations, a MFI may fail. However, liquid assets are usually associated with lower rates of return. The ratio of liquid assets to total assets (TA) is used in this study as a measure of liquidity.

3.6.3 General Terms
Financing Structure:
Capital **Structure** refers to the mix of debt and equity used to finance MFI as measured by debt-equity ratio.
Commercialization is the transformation of NGO backed institution to regulated MFI business.
Levered- a firm that employs debt in financing it self*.*
Portfolio at risk(PAR)>30 **days** is the most widely used measure of portfolio quality in the microfinance industry where MFI loan in general are considered to be risky if a payment on it is more than 30 days late.
Compulsory **saving** is the total value of compulsory saving deposits account.
Voluntary savings is the total value of voluntary savings demand deposit and time deposits accounts.
Total saving balance is the saving that are maintained as condition for current or future loan and are held with the MFIs for the purpose of securing loans.

4. RESULT AND DISCUSSION:
The section consists of five subsections. The theoretical section contains definition and performance measurement, performance of MFIs in Ethiopia and capital structure theories. The empirical section contains relationship between capital structure and performance and other factors influencing performance. So, this part deals with descriptive analysis and regression results and discussion.

4.1 Descriptive Statistics
Table 1 presents a summary of descriptive statistics of the dependent and independent variables used in the study. The mean profitability ROA of MFI is 1.89%, which indicates the average return on asset of one birr investment in total asset the institutions are averagely getting 1.89% cents net income. The standard deviation of the ROA of the industry shows more variation (3.95%) among the firms in generating profit. The minimum and maximum value of profitability is -6.91% and 9.85% respectively. Alternatively, ROE measures the contribution of net income invested by firms stock holder i.e. a measure of efficiency of the owners invested capital has the mean value 6.61% with standard deviation , minimum and maximum value of 15.98%, -101% and 36.45% respectively.

Table 4.1 Descriptive Statistics result

Variable	Obs.	Mean	Std. Dev.	Min	Max
ROA	112	.0189012	.0395306	-.0691	.0985
ROE	112	.0661562	.1598345	-1.0102	.3645
DE	112	.0661562	1.623764	01	8.56
SZ	112	7.66464	.7907944	6.05	9.95
AG	112	.8378903	.1722099	.047712	1.079181
TGB	112	.040335	.0372653	.003045	.196394
CAP ADQ	112	.4199313	.195918	.1046	.9943
LQ	112	.1969813	.1113556	.0142	.6349
PQ RSK	112	. 1236571	.1492419	.0014	.7462
GRW	112	.3492058	.8863378	-.99689	6.58619
OWN	112	.25	.4349588	0 1	1

Source: Author's Own computation using Stata package 11

The mean value of Leverage is 186% the minimum, maximum and standard deviation is 1%, 856% and 162% respectively. The average value of size of MFI is 7.66 (46, 269798.22) after total asset figure transformed in to ln (natural logarithm). To bring data to normal the researcher transformed age of a firm into ln. The average age of the firm is about 7 year (ln   0.8378) and this shows that the firms are not relatively young and the sampled MFI has shown variation among themselves in terms of functioning as they obtaining license from NBE. The average value of capital adequacy is 41.9%. This implies that 41;9% of the total assets of the sector were financed by shareholder's fund while the remaining 58.1% is deposit liability and others. The sampled Ethiopian micro finance institution hold three times more than the minimum statutory ratio 12% set by national bank of Ethiopia (2011). The average value of total current asset to total asset (liquidity) is 19.69%. The average value of portfolio quality, measured as portfolio at risk over 30 days (PAR> 30 days) of MFI is 12.36%.

4.2 REGRESSION RESULTS

Table 4.2 Regression result Using GLS (cluster robust)

Independent Variables	The effect of the capital structure of on Financial Performance of MFI			
	Model 1: The Effect of DE on FP Measured by ROA (Dependent Variable)		Model 2: The Effect of DE on FP Measured by ROE (Dependent Variable)	
	Coefficients (Robu. std err)	Z-value (p-value)	Coefficients (Robu. std err)	z-value (p-value)
DE	-.00779 (.003)	--2.47 (0.014)**	-.0264 (.013)	-1.918 (0.050)**
SZ	-.0046 (.005)	-0.78 (0.430)	.0250 (.022)	1.13 (0.259)
AG	.0082 (.022)	1.86 (0.063)***	0.1698 (.0857)	1.98 (0.048)**
TGB	-.0969 (0.11)	-0.87 (0.38)	-.8179 (.4205)	-1.95 (0.052) ***
CAP ADQ	-.1064 (.0337)	-3.15 (0.002)*	-0.0322 (.145)	-0.22 (0.825)
LQ	-.0242 (0.034)	-0.71 (0.476)	-.4149 (.128)	-3.22 (0.001)*
PQ	-0.0747 (0.022)	-3.32 (0.001)*	-.0625 (.091)	-0.68 (0.449)
GRW	0.001 (0.003)	0.28 (0.781)	.0120 (.013)	0.5897 (0.376)
OWN	0.0283 (0.010)	2.74 (0.006)*	0192 (.056)	2.33 (0.020)**
Cons.	.800	1.12	-5.75	2.39
Numb ob	112	112	112	112
Wald chi2(6)	*41.68* (P=0.0000)*		*53.23* (P=0.0000)*	
R-square	0.2018		0.2555	
Firms	16		16	
Sig.	**Level of significance *refers statistically significant at 1% , ** statistically significant at 5% and *** statistically significant at 10%**			

Source: Author's Own Computation Using Stata Package 11

Table 3 reports the random effect generalized least squire (GLS) results of financial performance measure (ROA and ROE) of MFIs. As it can be observed from the table Z and P value of total capital structure is -2.47 p=0.014 and -1.918 p=0.050 respectively. This implies that a change in total debt negative and statically affect financial performance of sampled Microfinance Institution in Ethiopia.

The model is significant at *Wald chi2 = 41.68 and 53.23, p- value <0.01.* The coefficient magnitude of leverage is negative, (-0.007) and (0.0264) and is significant at 5 % level of significance with return on asset (ROA) and return on equity (ROE) respectively. This implies that 1% increase in total debt decrees ROA and ROE approximately by 0.7% and 2.66 %. The findings of this study are consistent with prior empirical studies that found a negative relationship between leverage and performance (measured by ROA and ROE). This implies that firms with higher profit use less of debt. Consequently, MFI with higher profits increase the level of internal financing that preferred from debt because it is the easiest and quickest source of finance for most MFIs. Otherwise, an increase in leverage may reduce expected earnings by increasing the expected costs of financial distress, including bankruptcy. This suggests that MFIs should have acquire more capital in order to relay on their internal equity. So the finding is in line with packing order theory rather than trade off theory. The relationship between ROI and firm's size is negative with a coefficient magnitude -0.004 and in significant at p value of 0.43. Similarly, the relationship between ROE and the size of firm is positive with coefficient magnitude 0.025 and in significant at p value 0.259. It is inconclusive result because of the complex nature of the organization with a multi dimensional objective to pursue at different times. In one breadth they target outreach the poorest of the poor and in other breadth they targeting profit for institutional sustainability. The relationship between firm's age and both (ROI and ROE) is positive and significant at P value 10% and 5% respectively; This implies that, an increase in firm's age result an increase in performance; In other word, as a firm continuously longer in business, it establishes itself as an ongoing business and therefore increases its capacity and profitable. The relationship between ROA and Asset tangibility is negative and in significant. However, the relationship between ROE and asset tangibility is negative and significant at 10 % level. This implies that firms

with high ratio of tangibility have a lower financial performance measured by ROE. The relation between capital adequacy and ROA is negative with P-value of (0.002) statistically significance at 1 % level but not on return on equity. This result reveals that an increase capital adequacy may results decrease in financial performance of a MFI measured by return on asset. This may be the more the equity providers to Ethiopian MFIs, the higher the claim from the institutions retained earnings in the form of dividends. This leads to less retained funds available to the institution for the growth purposes, The regression result reveals a negative relationship between liquidity and performance measured by ROA and statistically in significance with p-value of (0.476) level. However, the relationship between liquidity and performance measured by return on equity is negative with coefficient value -0.414 and significant at p- value (0.001). This shows that Ethiopian MFIs should give more attention on liquidity risk management that result decrease in their performance.

The regression result shows a negative relationship between portfolio quality and return on asset is also observed. This implies the inability of credit customers to pay what, they owed in full and on time. This is the main challenges in Ethiopian Microfinance institution (AEMFI, 2011). The reason may be inappropriate credit policies, (poor screening policy), poor management, inappropriate laws, reckless lending, poor credit assessment and others. So to minimize these risks, it is necessary for the institution to have well-capitalized that can easily service to a wide range of customers, sharing of information about borrowers. The relationship between ownership and return on asset and return on equity is positive and statically significant at 5% and 10% respectively. This can be explained, MFIs that are owned by government development agencies are more profitable than the others. Because, they, are well guaranteed by accessing the commercial loans provision from the providers of capital to serve as a guarantee than the others and /or due to guarantee given by the government as well as proper supervision by managers of the firm, which reduces the lenders risk.

5.1 Conclusions

This study has taken empirical step to examine the effect of capital structure on Financial Performance of Microfinance Institution in Ethiopia. The result shows an empirical link between the drivers of capital structure of MFI and the financial performance theory. The main result of the study suggests that capital structure of Ethiopian MFIs industry affects the financial performance of MFIs.

It was noted that capital structure effect, as it was hypothesized, shows some consistency with a number of theoretical propositions. From this view the implication that the theories which explain the debt-equity choice in financial firms seem to be able to accommodate MFI capital structure decisions and performance relationship. However, size, ownership structure and firm level consequences appear to be a material element for the understanding of unique behaviour of MFI. Further studying of this fact had to be properly taken into consideration while drawing conclusions from the empirical results.

The following conclusions have been drawn from the study:

The empirical results provide that there exist significant effects of capital structure on financial performance of Ethiopian MFIs.

Though debt financing has been accepted and empirical result to be beneficial for MFI industry to increase large scale of outreach and ensure the sustainability of the institutions in the long term. However, the practice of debt financing in the industry suffers from a number of factors in addition to the above empirically tested determinants.

This study examined the effect of capital structure on Micro finance Institutions Financial Performance, as measured by return on asset s and equity; A vast literature investigates the effect of capital structure on firm's financial performance since the seminal work of Modigliani and miller (1958). Most of these studies carried out in developed countries and documented that, a positive or negative relation between capital structure and firms performance (Abor, 2005; Berger and Dipatti, 2002; Akintoye, 2008). To fill this gap it is needed to study the effect of capital structure on firms' financial performance for MFIs in Ethiopia. Therefore, the researcher used secondary data obtained from mix market and audited annual financial reports over the period of 2008-2015. Even though, the institutions debt equity ratio is under levered, as prescribed by Basle accord (the international capital adequacy standard for regulated financial institutions) and the institutional report benchmark, the existing debt-equity ratio negatively affects the performance of the firms. This is due to less use of debt coupled with poor management, reckless lending particularly to the poor and others. Therefore, the policy makers, regulators and the concerned parties should consider the MFIs governing rules and regulations of debt so as to, make them profitable. The capital adequacy ratio of most MFIs in Ethiopia is more than the statutory requirement set by regulatory requirement which affected negatively the firm performance. This is due to the more the equity providers to MFIs, the higher the claim from the institutions retained earnings in the form of dividends. These may leads to less retained funds to the institution and erode the profit. Therefore, the NBE of the Ethiopian MFIs should set a clear rules and regulations when and what amount of percent of dividends should go to the equity providers of the MFIs and the MFIs also, should use the capital adequacy up to the requirements. The relationship between liquidity and performance of Ethiopian MFIs is negative and statically significant. This

implies that, most of Ethiopian MFIs maintained excess liquid which is none earning, that is, asset. Therefore, management of the MFIs should monitor cash flow closely and ensure fund that left to lie idle and invest as per the regulation of the institutions.

5.2 Recommendations

On the basis of the above conclusions the following recommendations are forwarded by the researcher. The majority of Ethiopian MFIs are lagging behind the industry average debt-equity ratio and other benchmarks reported and recommended by the sector analysts such as CGPA, MIXMKT industry report globally. Therefore, those MFIs which are highly profitable should use equity finance (less debt) as the finding indicates. Alternatively, as more profitable MFIs use retained earnings as a major means of financing they employ less debt. This implies that the industry is using more of donated equity, shareholder's capital and/ or retained earning rather than debt financing. This means those MFIs which have more preference towards equity should work aggressively to be profitable. To be profitable, the MFIs should manage their revenues and costs. Revenues should be pushed much whereas costs should be managed.

The most important factor that affects the Financial Performance of MFI is asset structure (tangibility). Tangibility has a negative and significant impact on the Ethiopian MFI leverage. This means those MFIs which have more collateral are accessing more debt as opposed to those MFIs with less collateral. This means collateral is highly required to access debt. As tangibility has a negative significant impact on leverage of MFI due to the fact the absence of the institutions investment in fixed asset can't go with the objective of the firm. However, MFI should at least increase the proportion of investment in fixed asset or else as it is practiced in other parts MFIs are using development funding and grants to guarantee commercial debt (AEMFI, 2009). The other factor that affects leverage of Ethiopian MFI is size. The results show that MFI size has a positive and highly significant impact on leverage of the sampled MFI. This means those MFIs who have more preference for debt should increase their size significantly by raising more external finance that is debt.

Saving mobilization is hampered by lack of promotion on the part of MFIs about their products and the MFI are not using the potential of saving to the maximum. Therefore, the institutions should aggressively mobilize saving from institutional investors and promote themselves to the general public to exercise their power by the NBE regulation 40/96 as a financial intermediary.

The Ethiopian MFI industry should aggressively use debt financing as they are far away from the industry average and other benchmarks recommended by the sector analysts.

The regulatory authorities of these sectors (NBE) should relax regulations for these sectors in order to achieve their major objectives of the institutions. At least the leverage of MFI should be relaxed to the Basel accord agreement allow for financial institutions to the maximum of 12x leverage rather than 5% of their equity capital as per NBE.

The major providers of capital in the industry RUFIP, CBE and IFAD should be empowered in borrowing from international finance organization which lend for MFIs at a very subsidized rate.

The government should consider the role of MFI industry playing in alleviating poverty and economic growth of the country by supporting and facilitating investment opportunities available for private investors in the sector.

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